

Program Complot
(Version 2018-1)

by

Dermott E. Cullen
(Present Contact Information)

Dermott E. Cullen
1466 Hudson Way
Livermore, CA 94550
U.S.A.

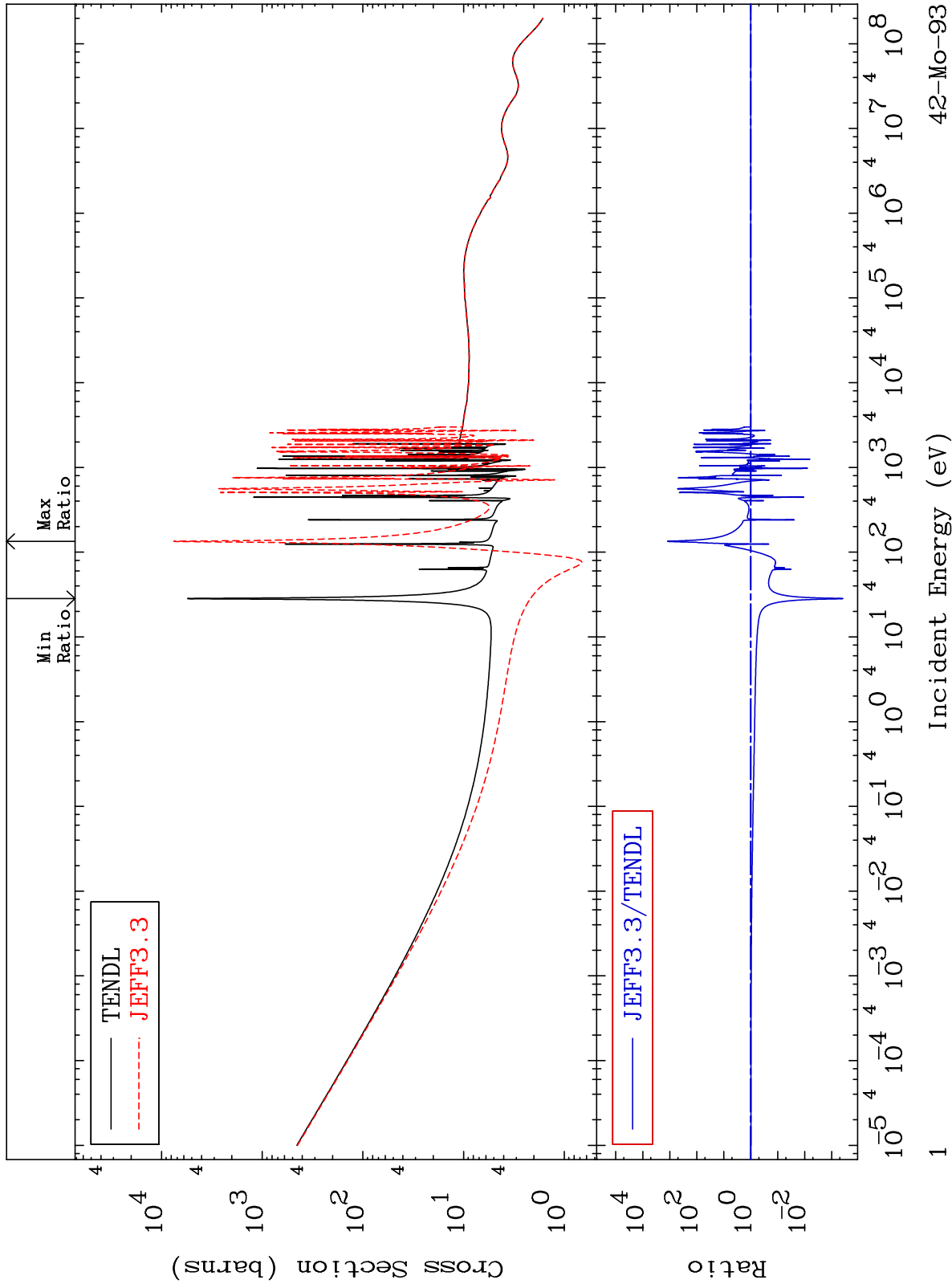
Tele: 925-443-1911
E.Mail:redcullen1@comcast.net
Web:redcullen1.net/HOMEPAGE.NEW

Press Mouse Button to Start

MAT 4228

Total
Cross Section

42-Mo-93
-99.96 To 9999. %



42-Mo-93

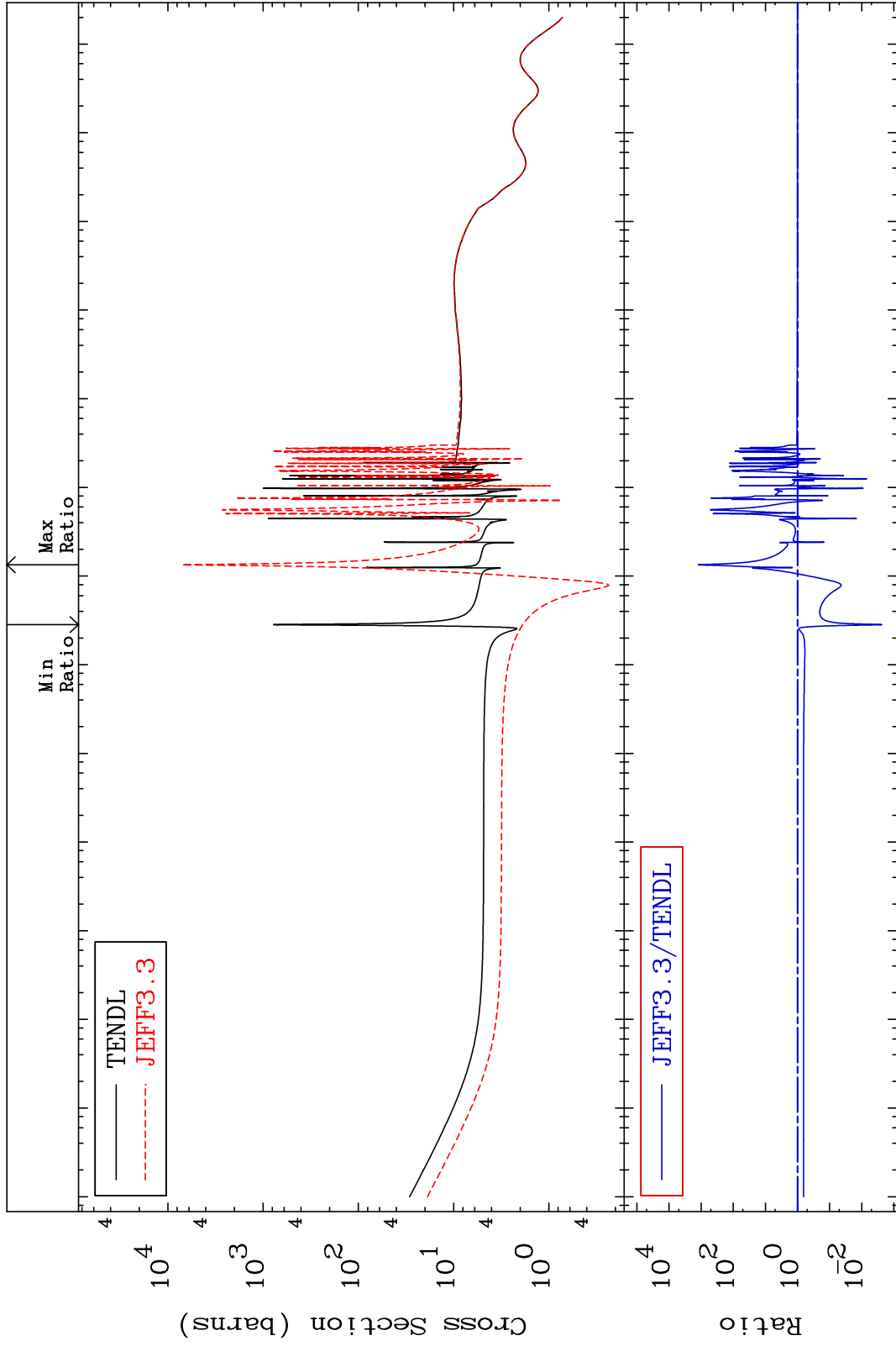
MAT 4228

Elastic

42-Mo-93

Cross Section

-99.76 To 9999. %



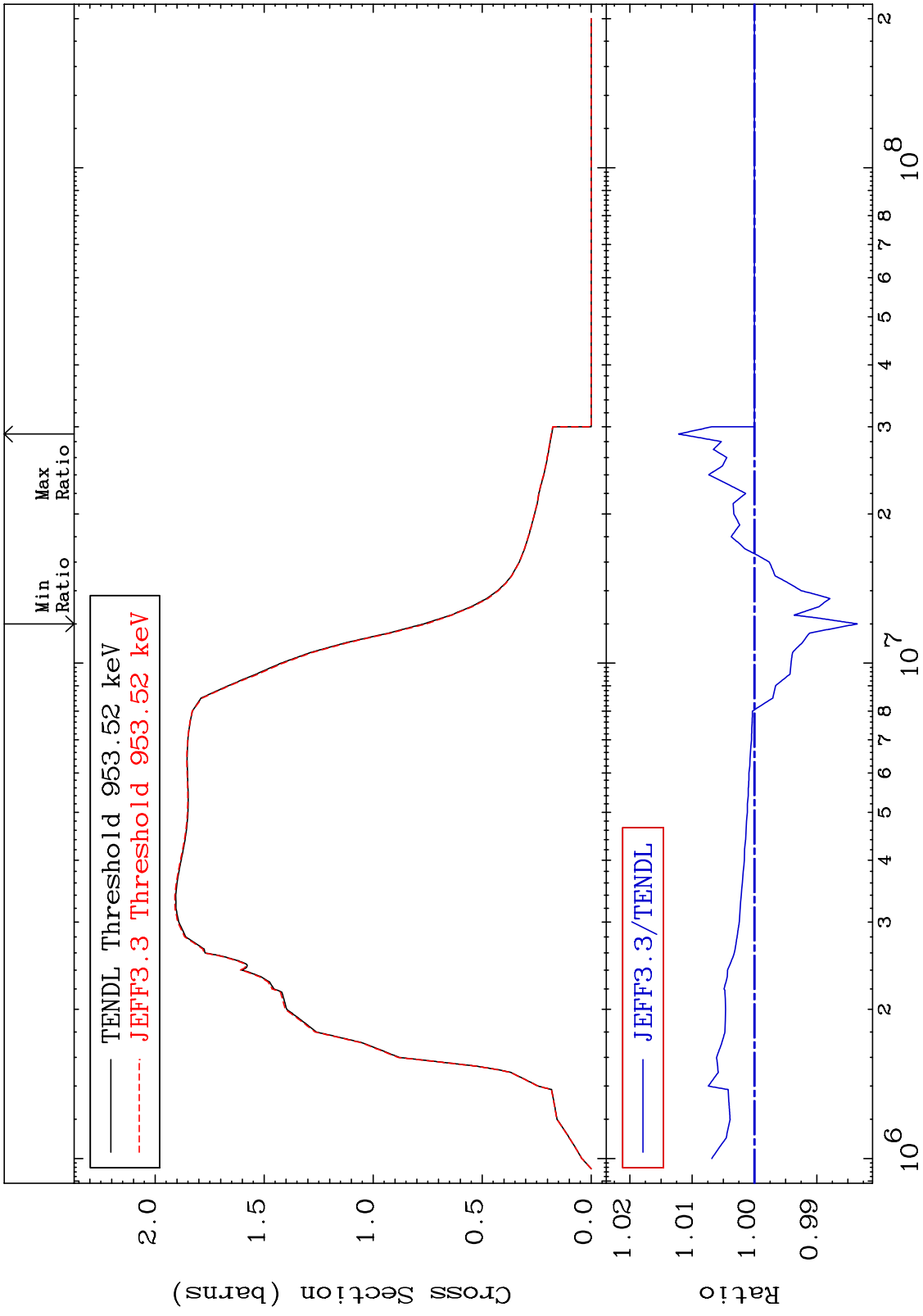
MAT 4228

Inelastic

42-Mo-93

-1.651 To 1.218 %

Cross Section



Incident Energy (eV)

42-Mo-93

3

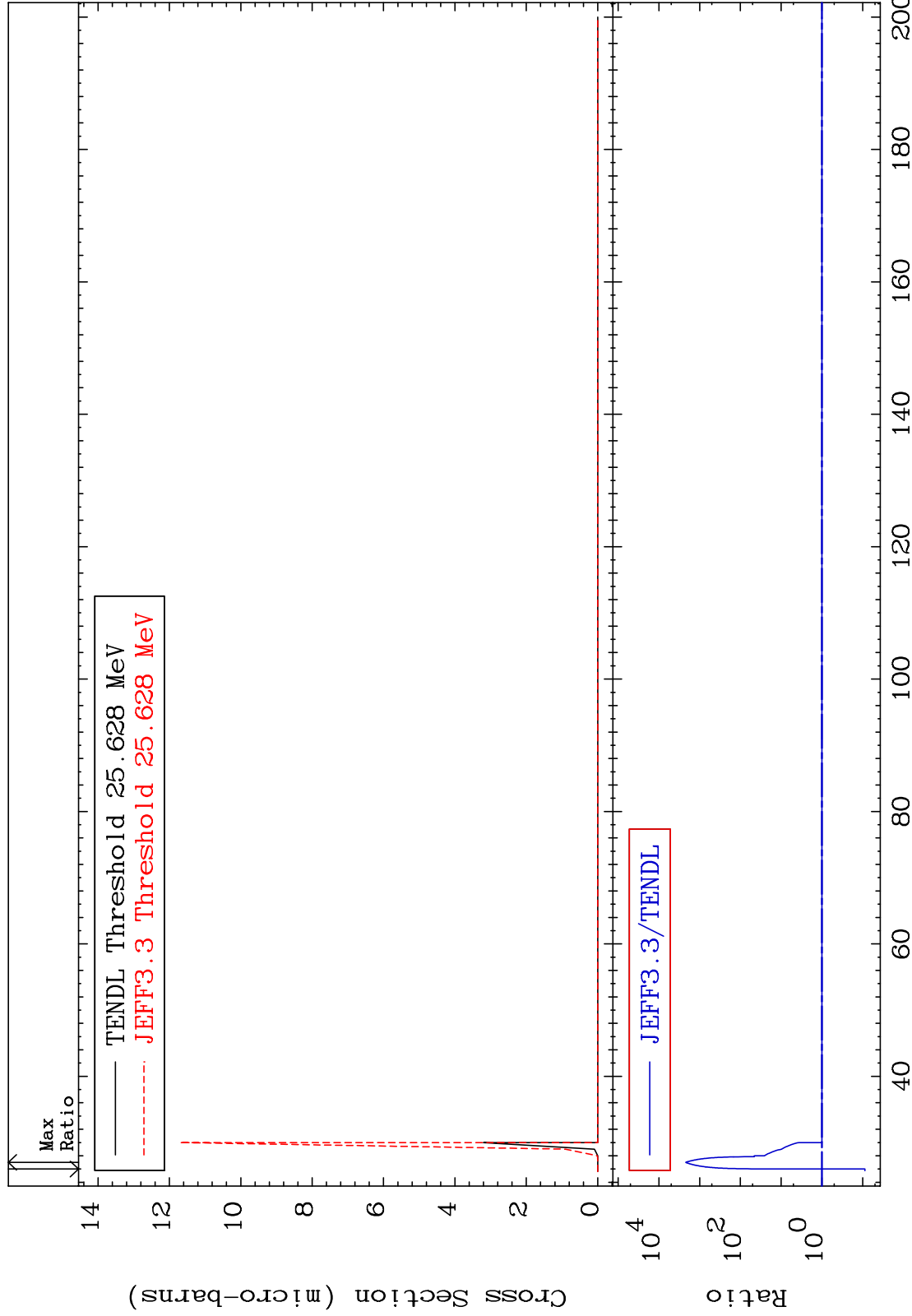
MAT 4228

(n,2n) d

42-Mo-93

Cross Section

-91.22 To 9999. %



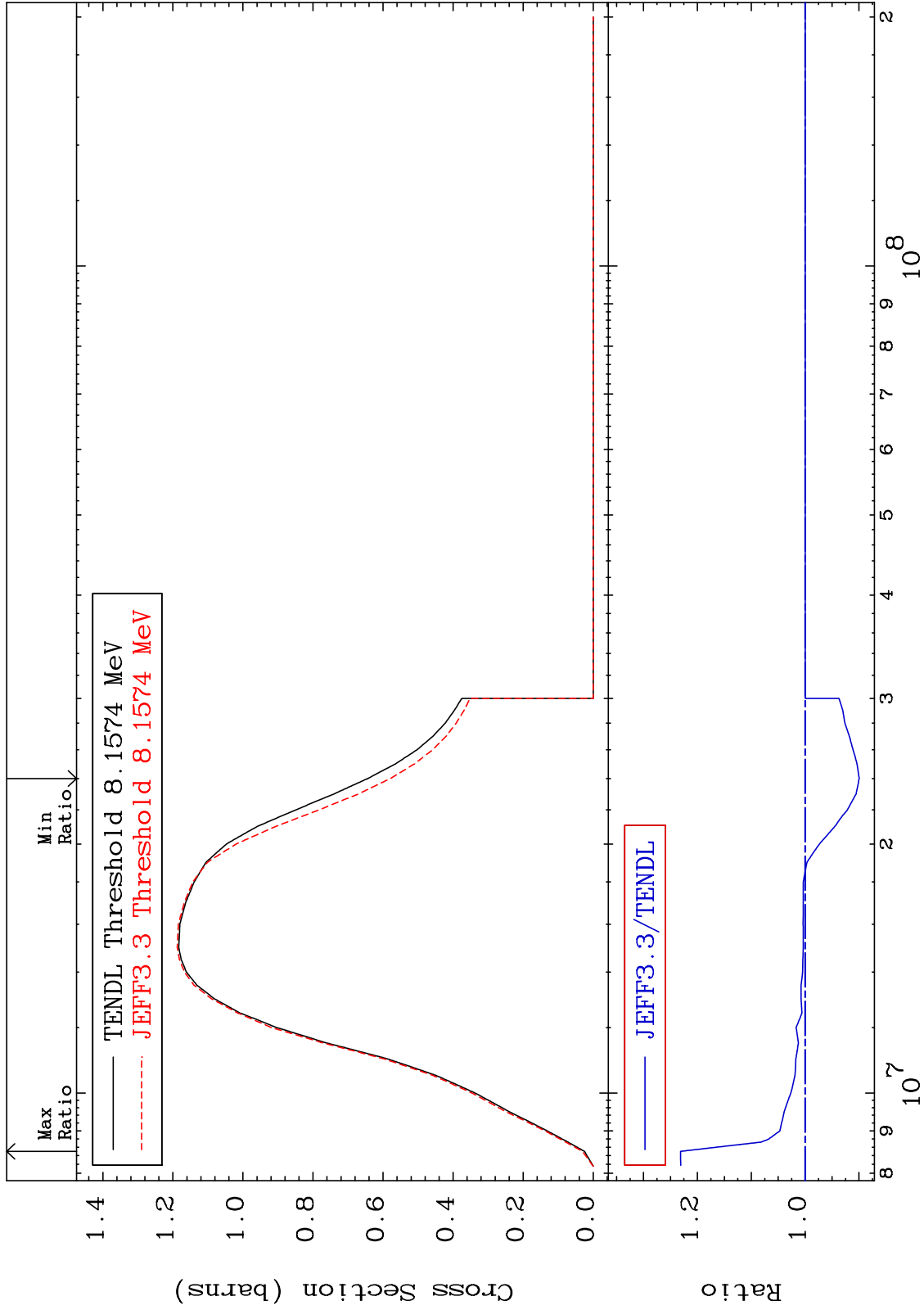
MAT 4228

(n, 2n)

42-Mo-93

Cross Section

-10.03 To 23.11 %



42-Mo-93

42-Mo-93

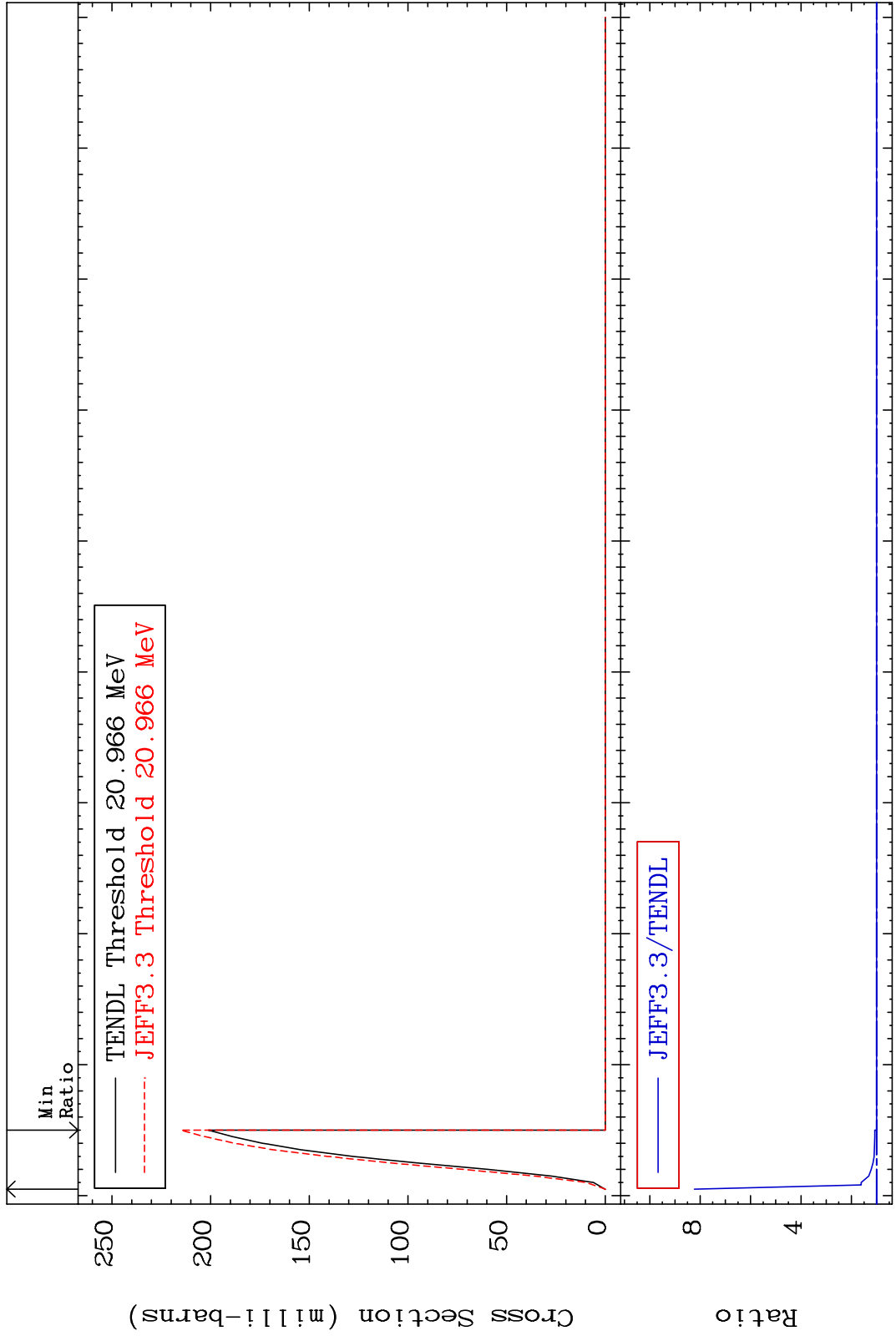
MAT 4228

(n, 3n)

42-Mo-93

Cross Section

0.000 To 722.6 %



Incident Energy (MeV)

6

42-Mo-93

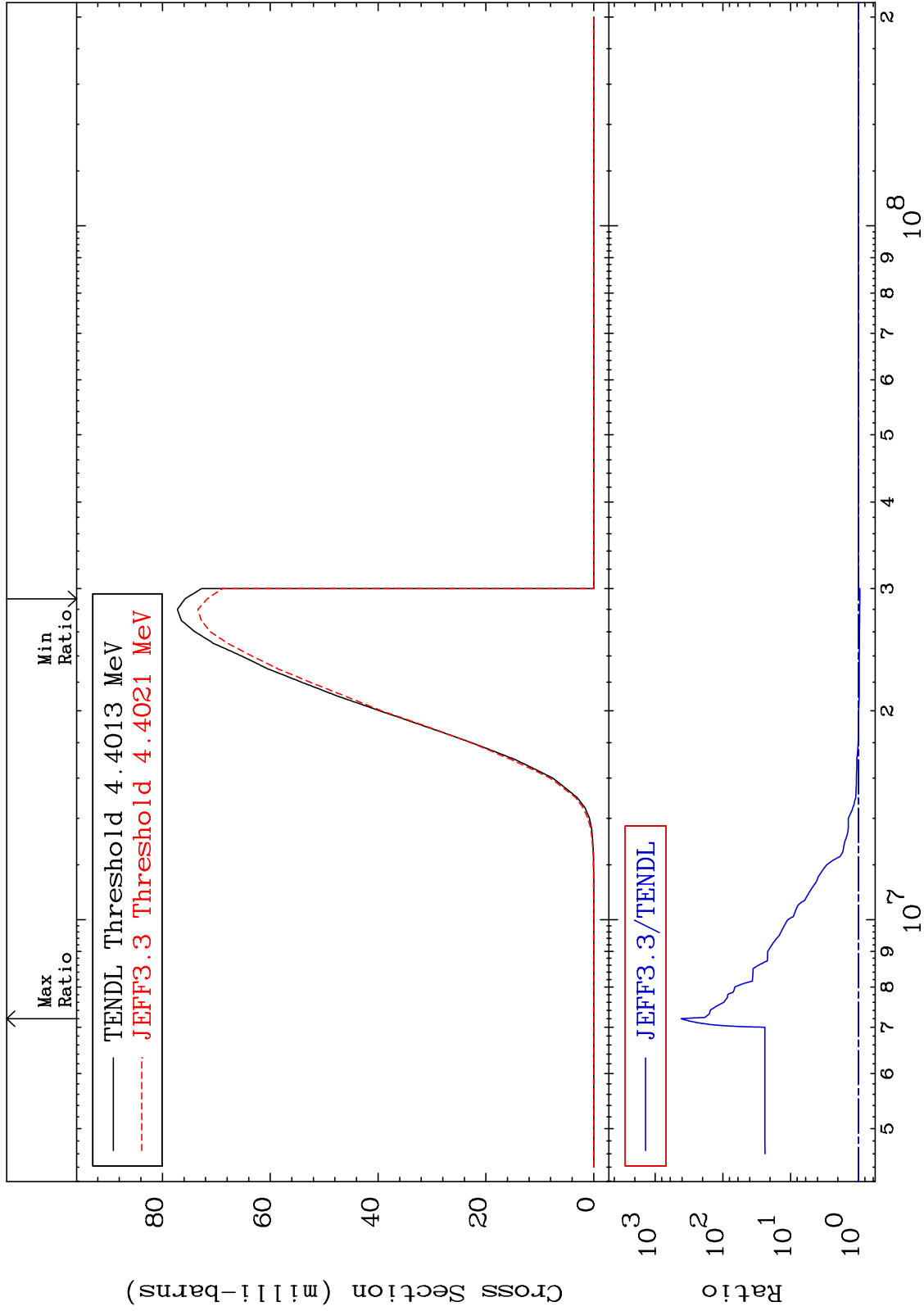
MAT 4228

(n,n') α

42-Mo-93

Cross Section

-5.459 To 9999. %



42-Mo-93

Incident Energy (eV)

7

MAT 4228

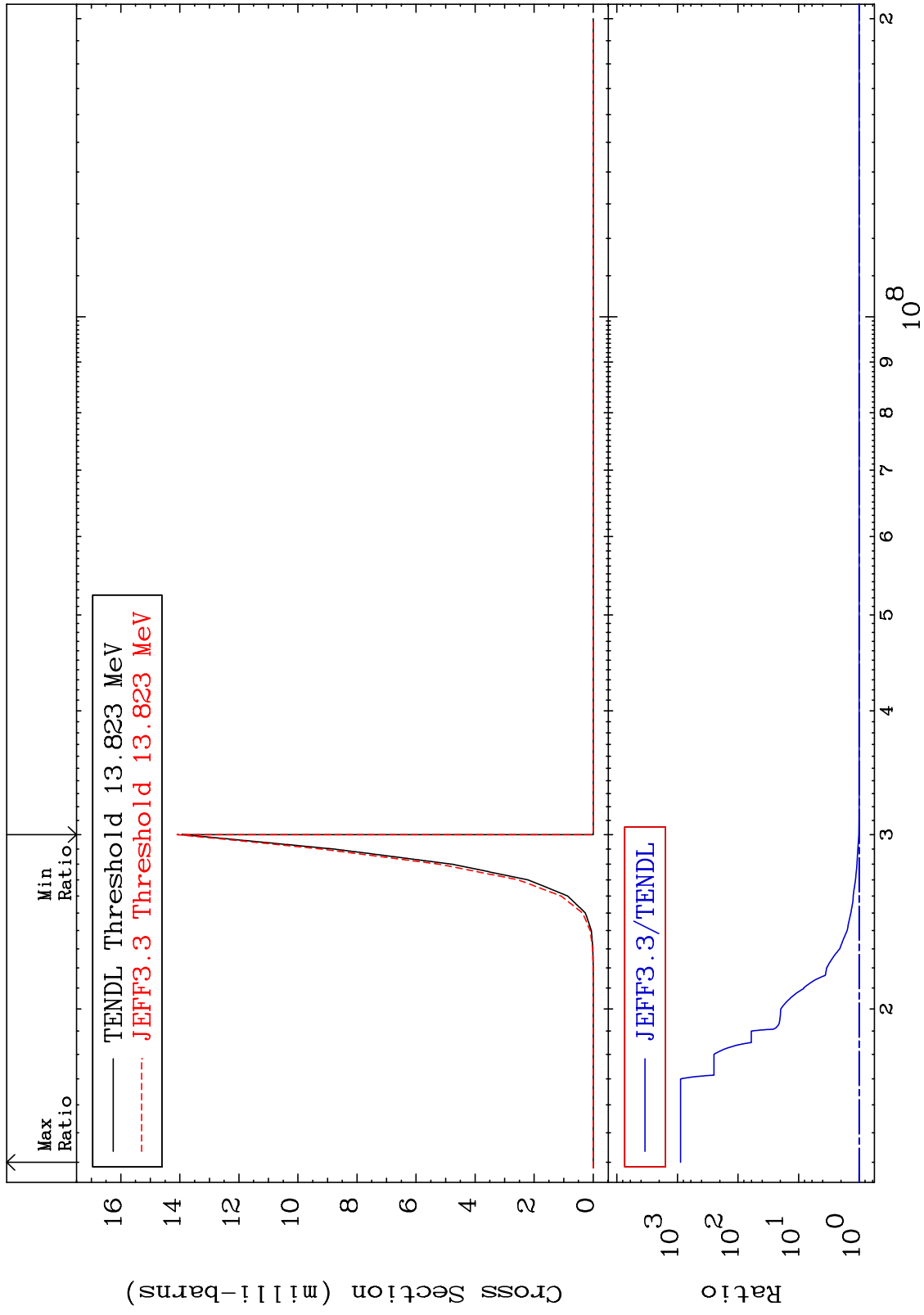
(n,2n) α

42-Mo-93

Cross Section

0.000

To 9999. %



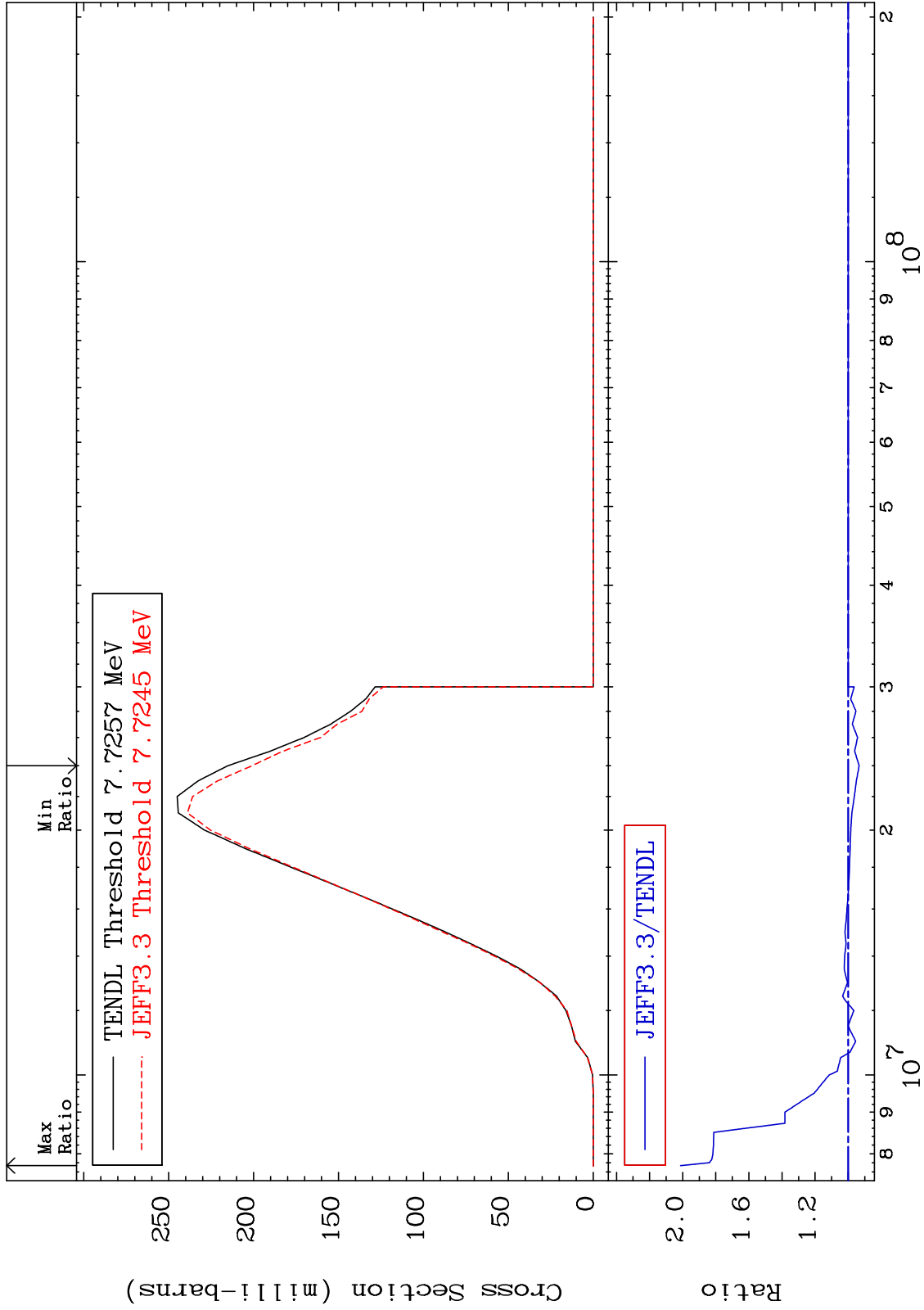
MAT 4228

(n,n') p

42-Mo-93

Cross Section

-6.624 To 101.3 %



9

Incident Energy (eV)

42-Mo-93

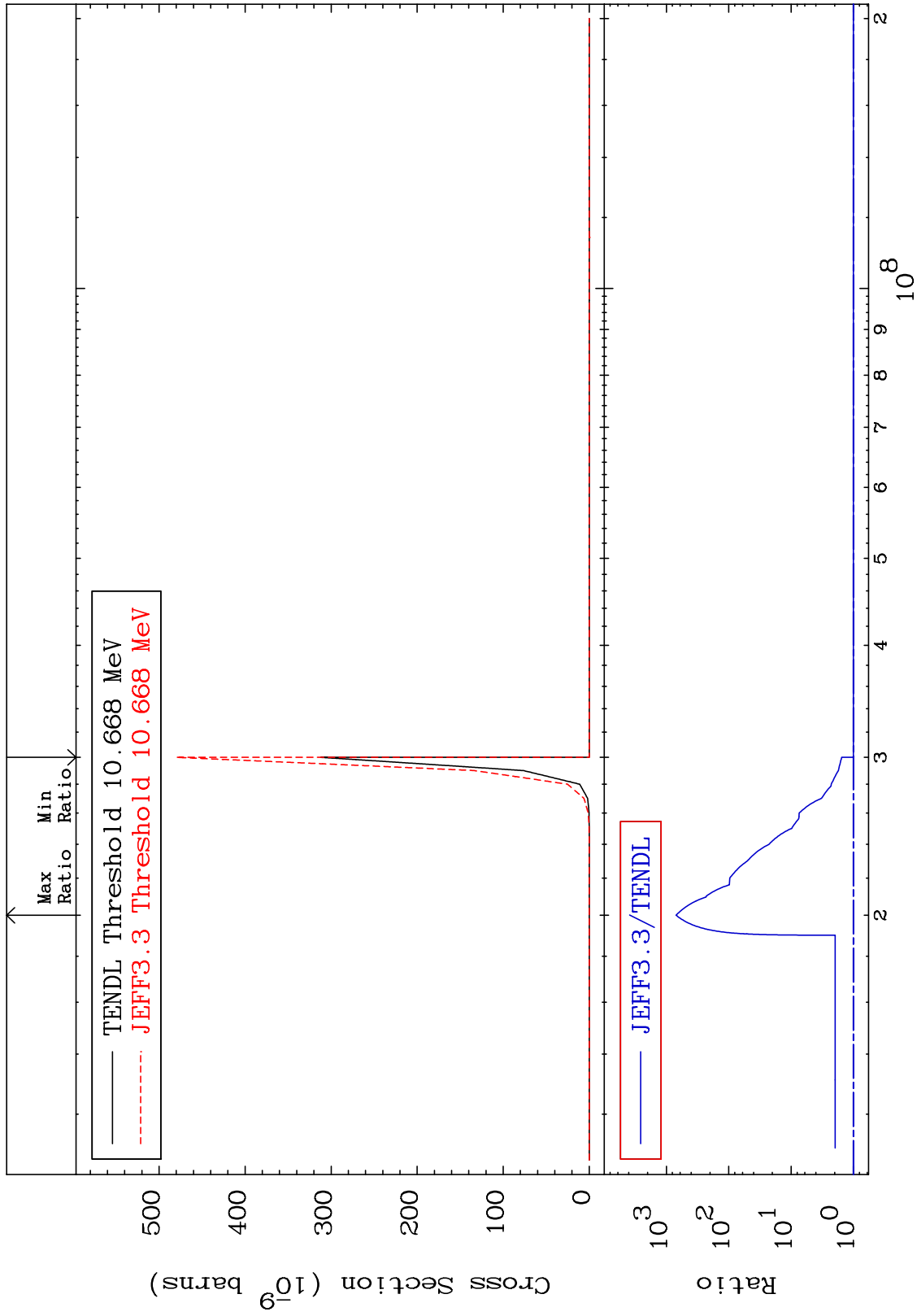
MAT 4228

(n,n') 2α

42-Mo-93

Cross Section

0.000 To 9999. %



10

Incident Energy (eV)

42-Mo-93

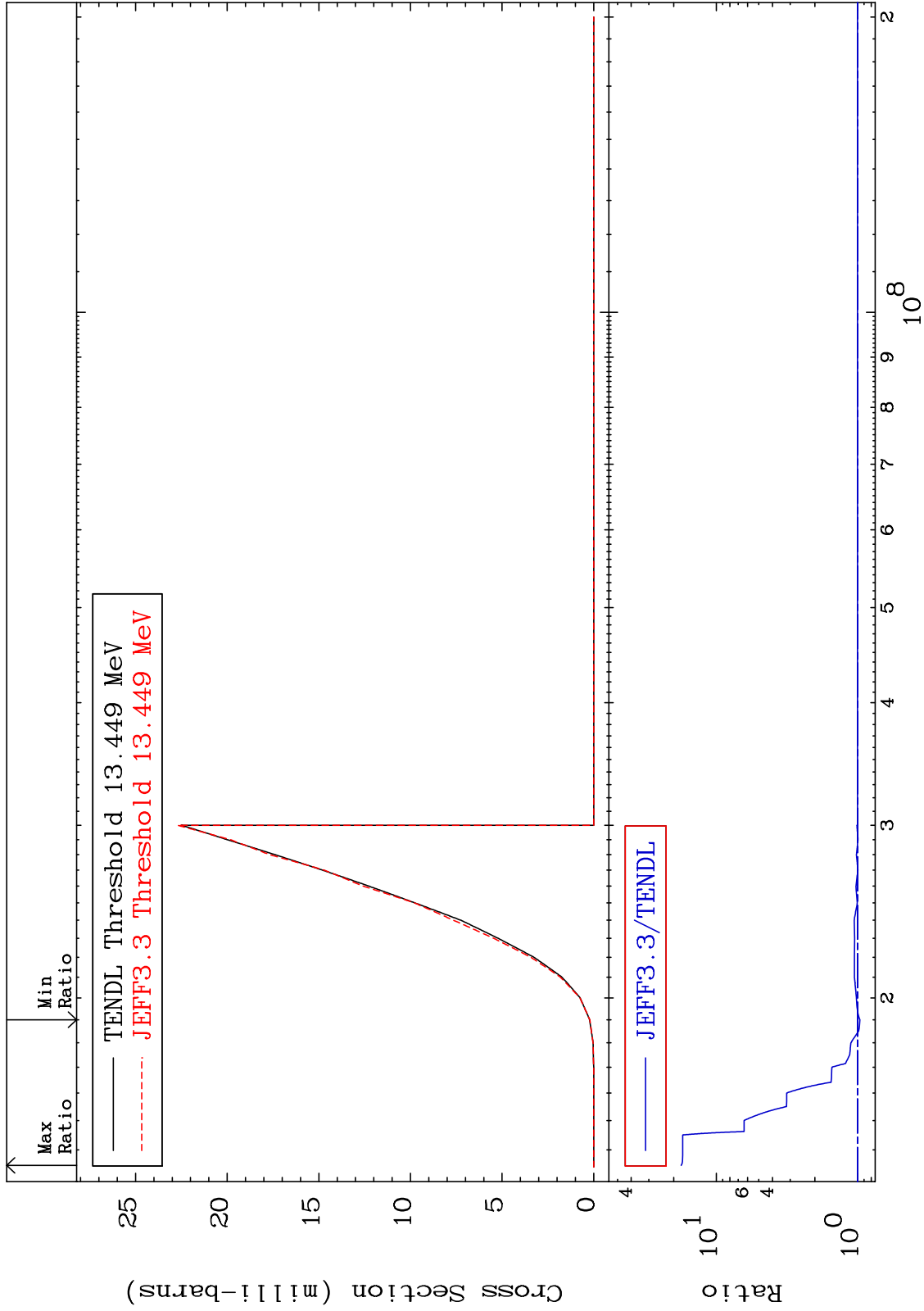
MAT 4228

(n, n') d

42-Mo-93

Cross Section

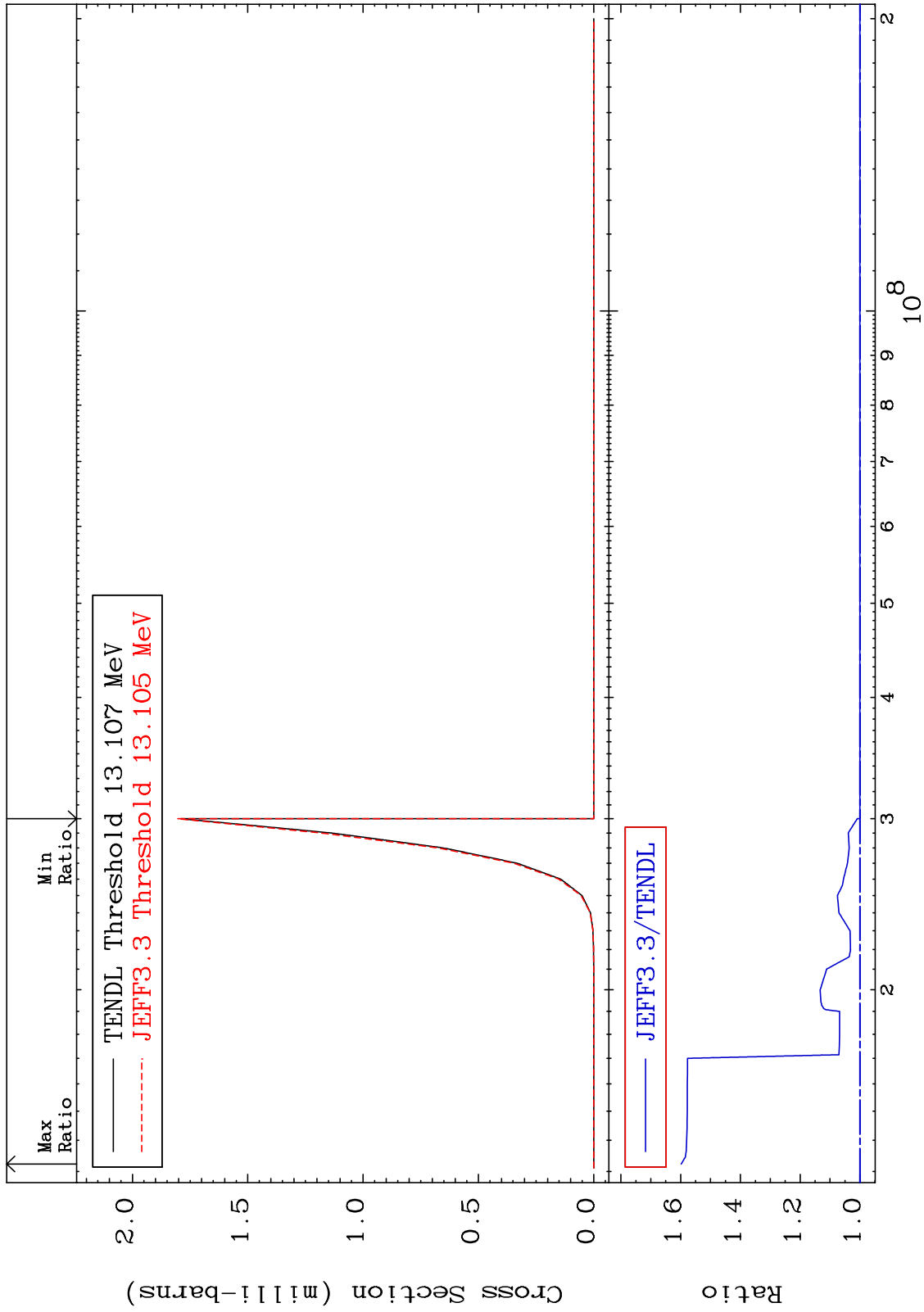
-3.931 To 1670. %



MAT 4228

(n, n') He-3
Cross Section

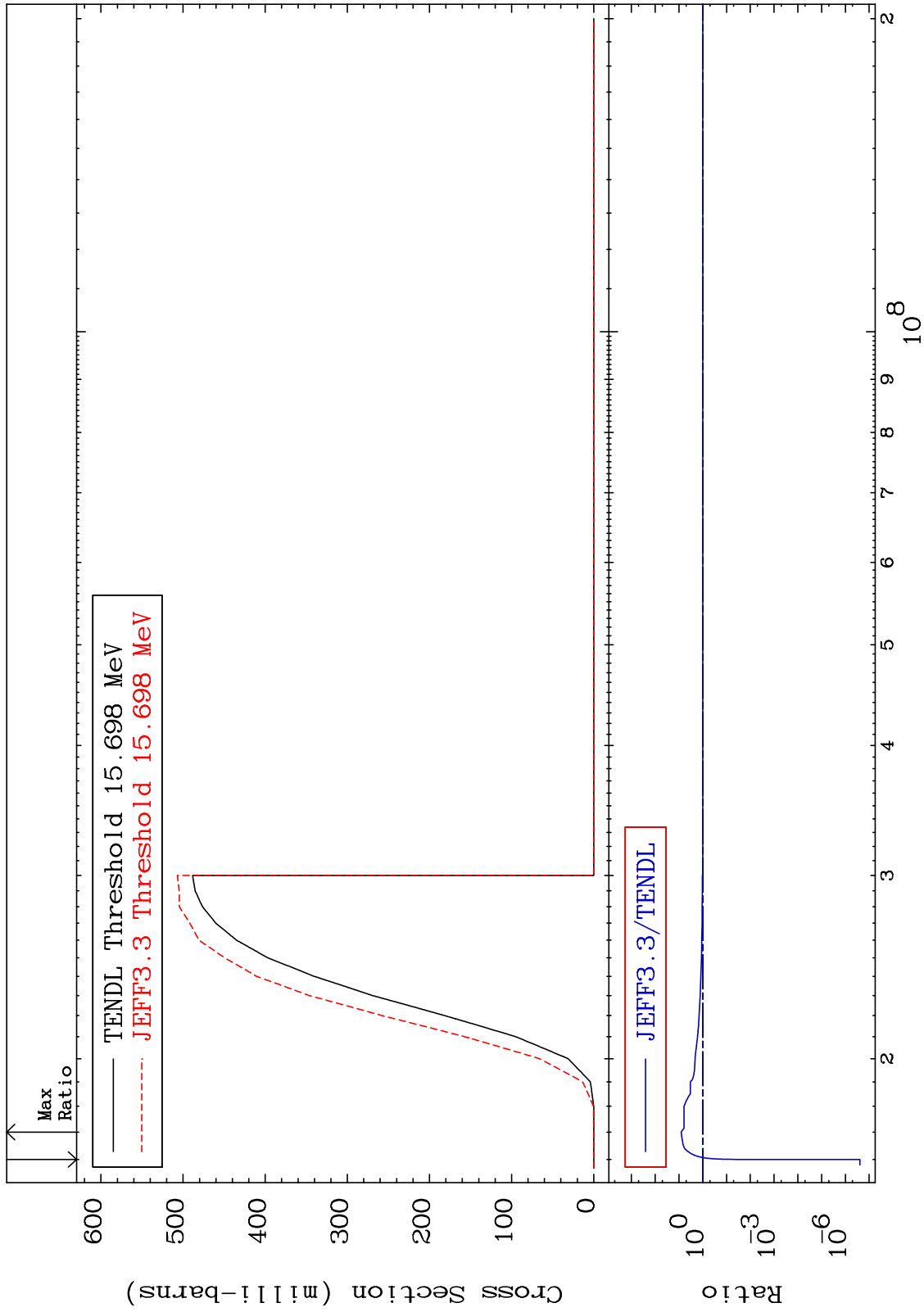
42-Mo-93
0.000 To 59.81 %



MAT 4228

(n,2n) p
Cross Section

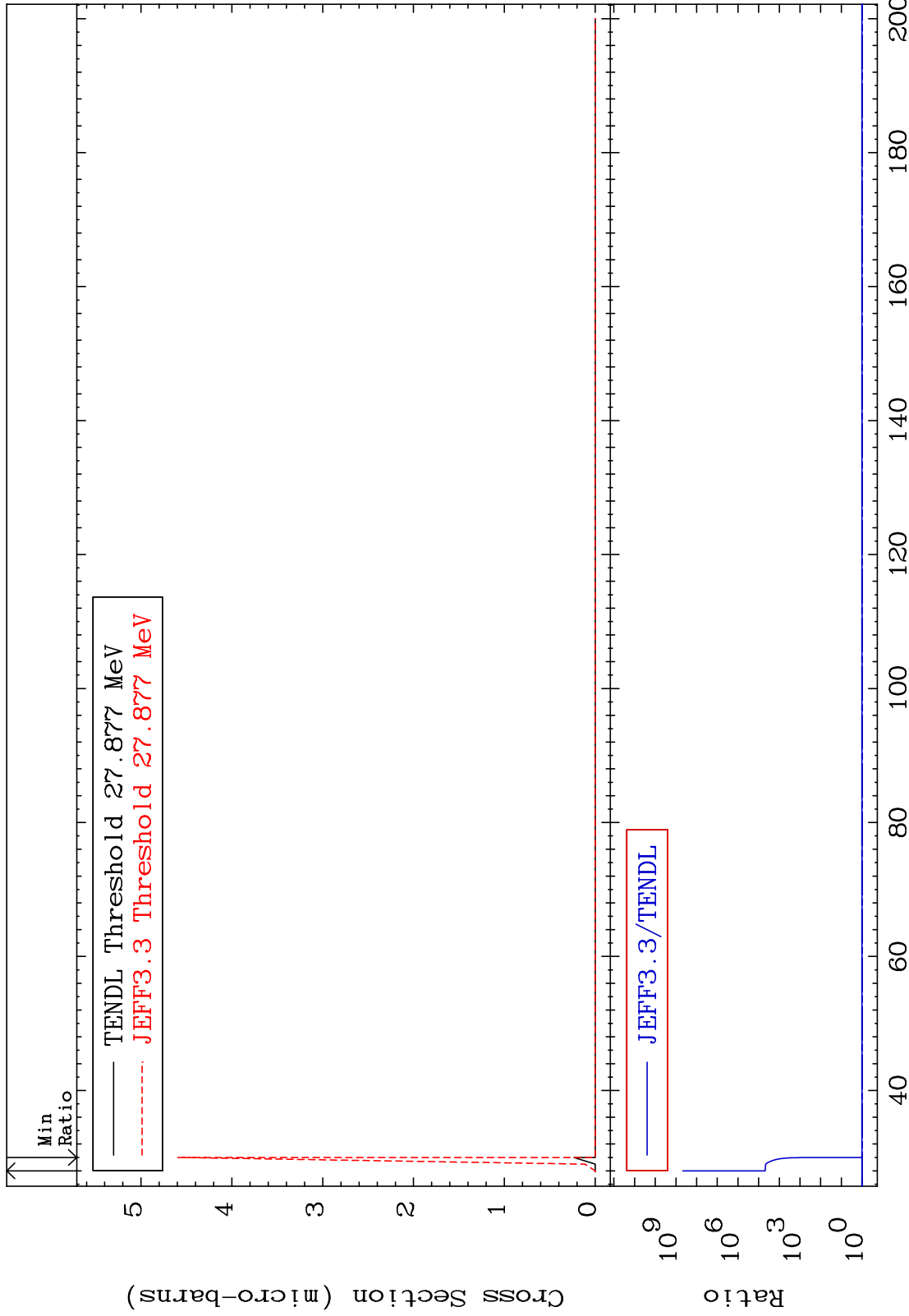
42-Mo-93
-100.0 To 704.1 %



MAT 4228

(n,3n) p
Cross Section

0.000 To 9999. %
42-Mo-93



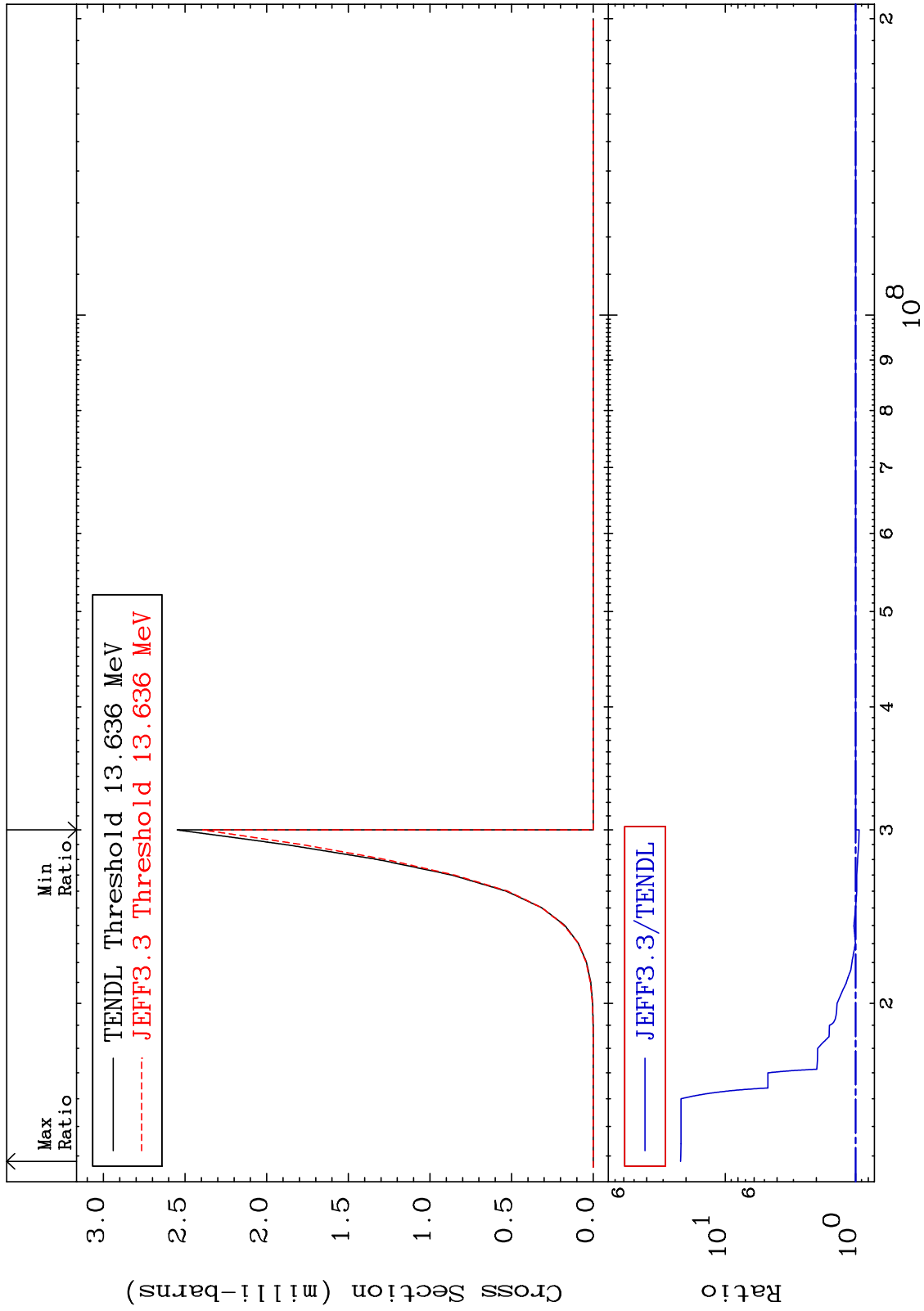
MAT 4228

(n,2n) p

42-Mo-93

Cross Section

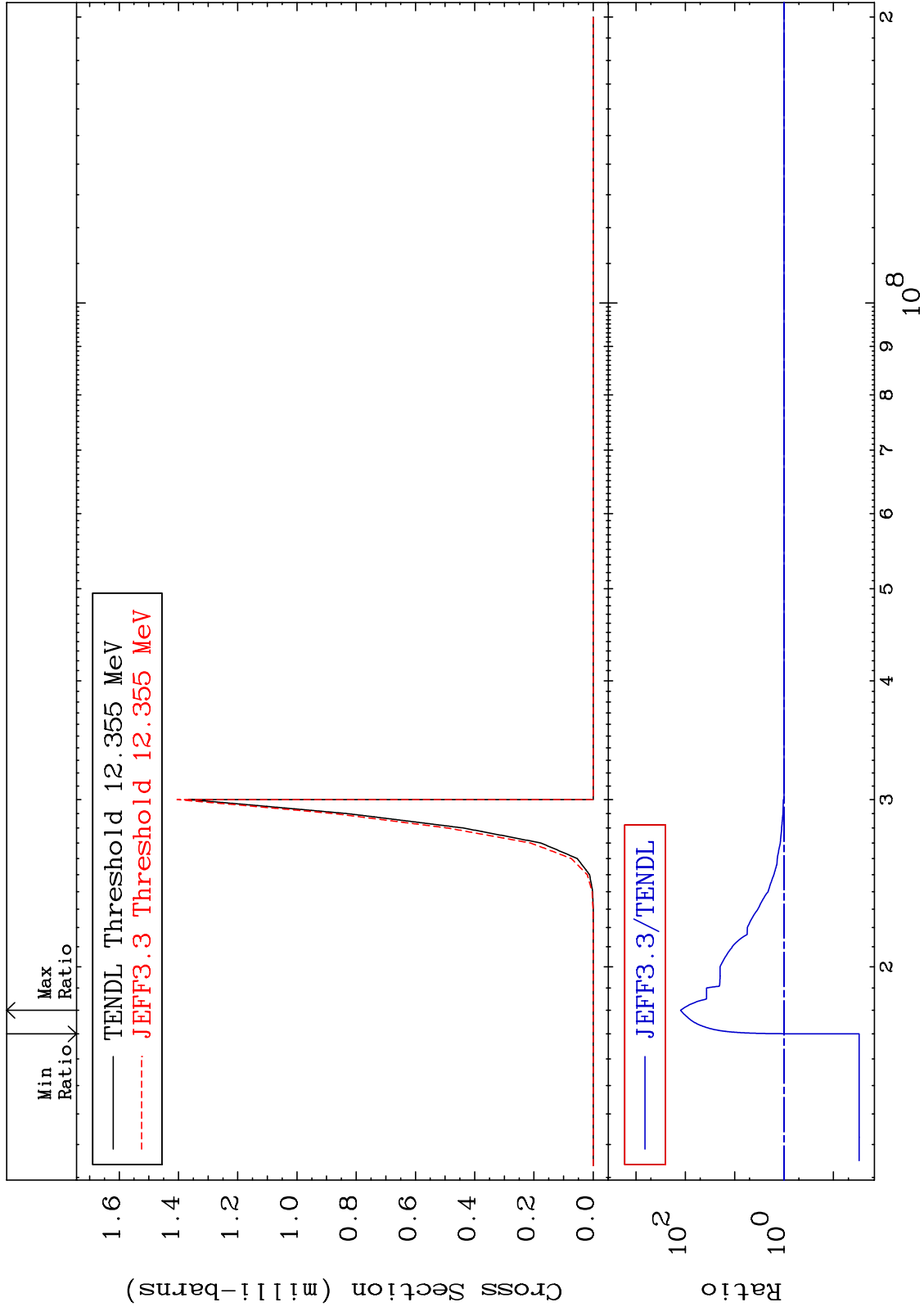
-6.133 To 2099. %



MAT 4228

(n,n') p α
Cross Section

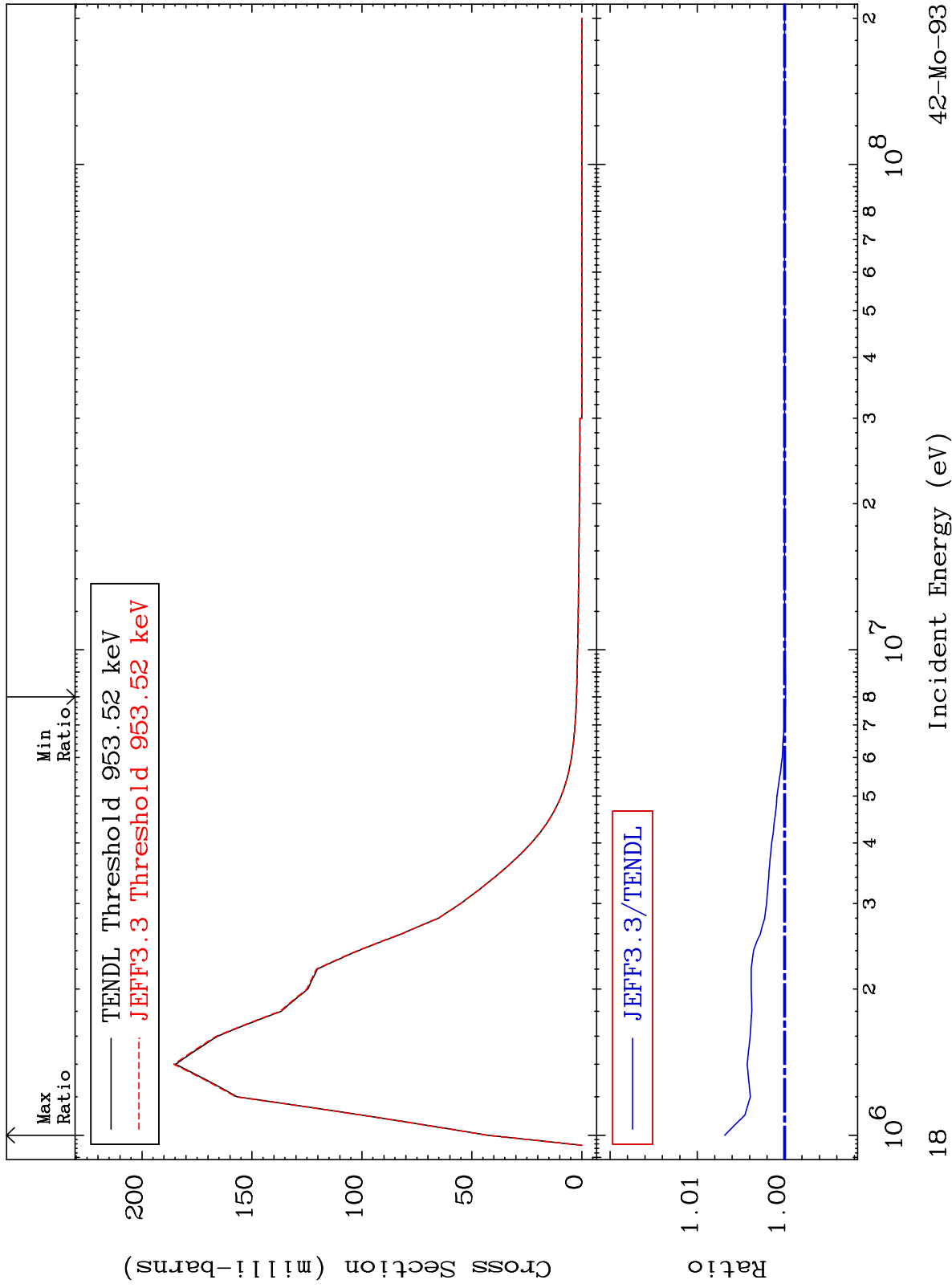
42-Mo-93
-96.99 To 9999. %



MAT 4228

MT= 51 (n,n') Level
Cross Section

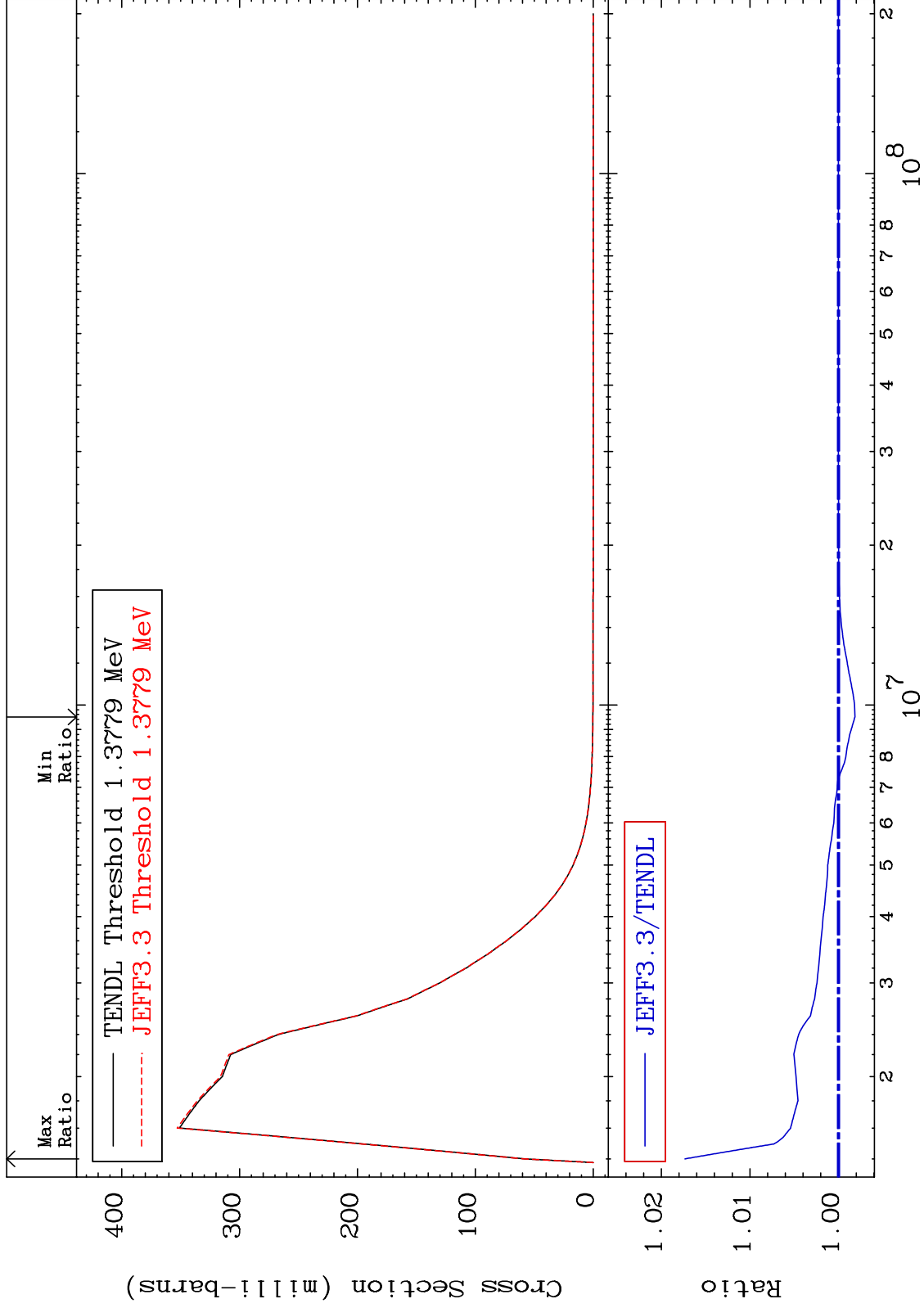
42-Mo-93
-0.011 To 0.686 %



MAT 4228

MT= 52 (n,n') Level
Cross Section

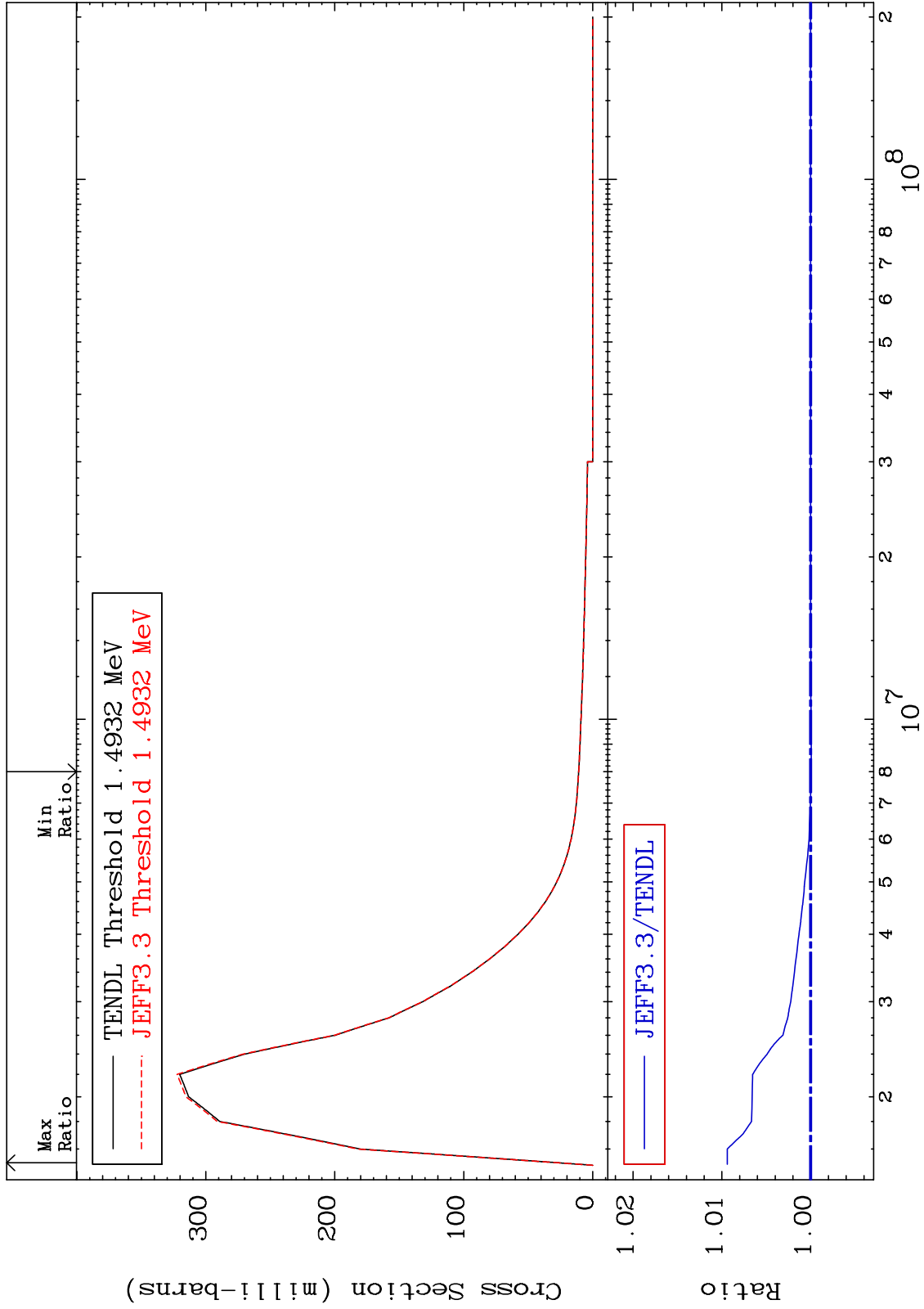
42-Mo-93
-0.185 To 1.734 %



MAT 4228

MT= 53 (n, n') Level
Cross Section

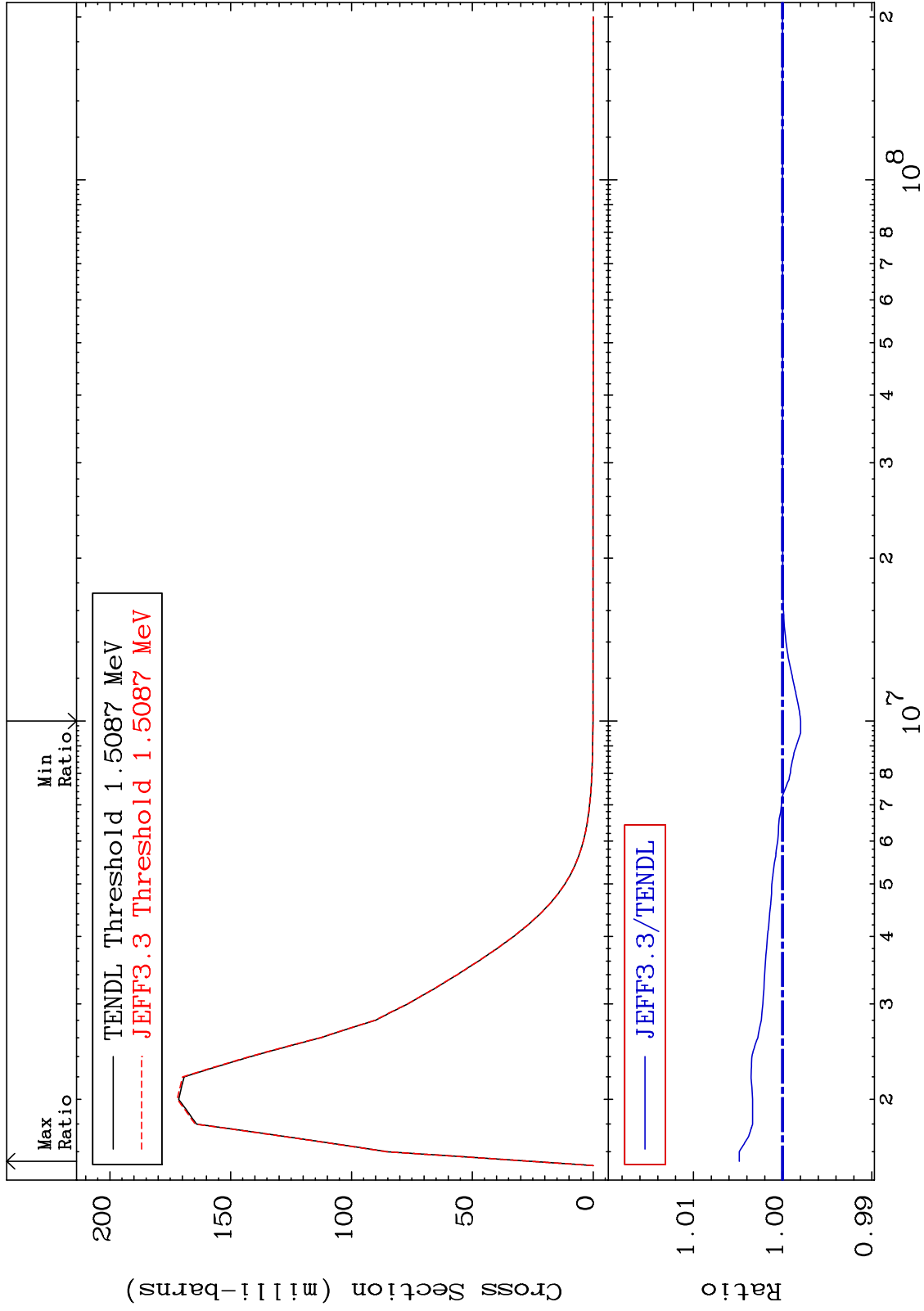
42-Mo-93
-0.006 To 0.941 %



MAT 4228

MT= 54 (n,n') Level
Cross Section

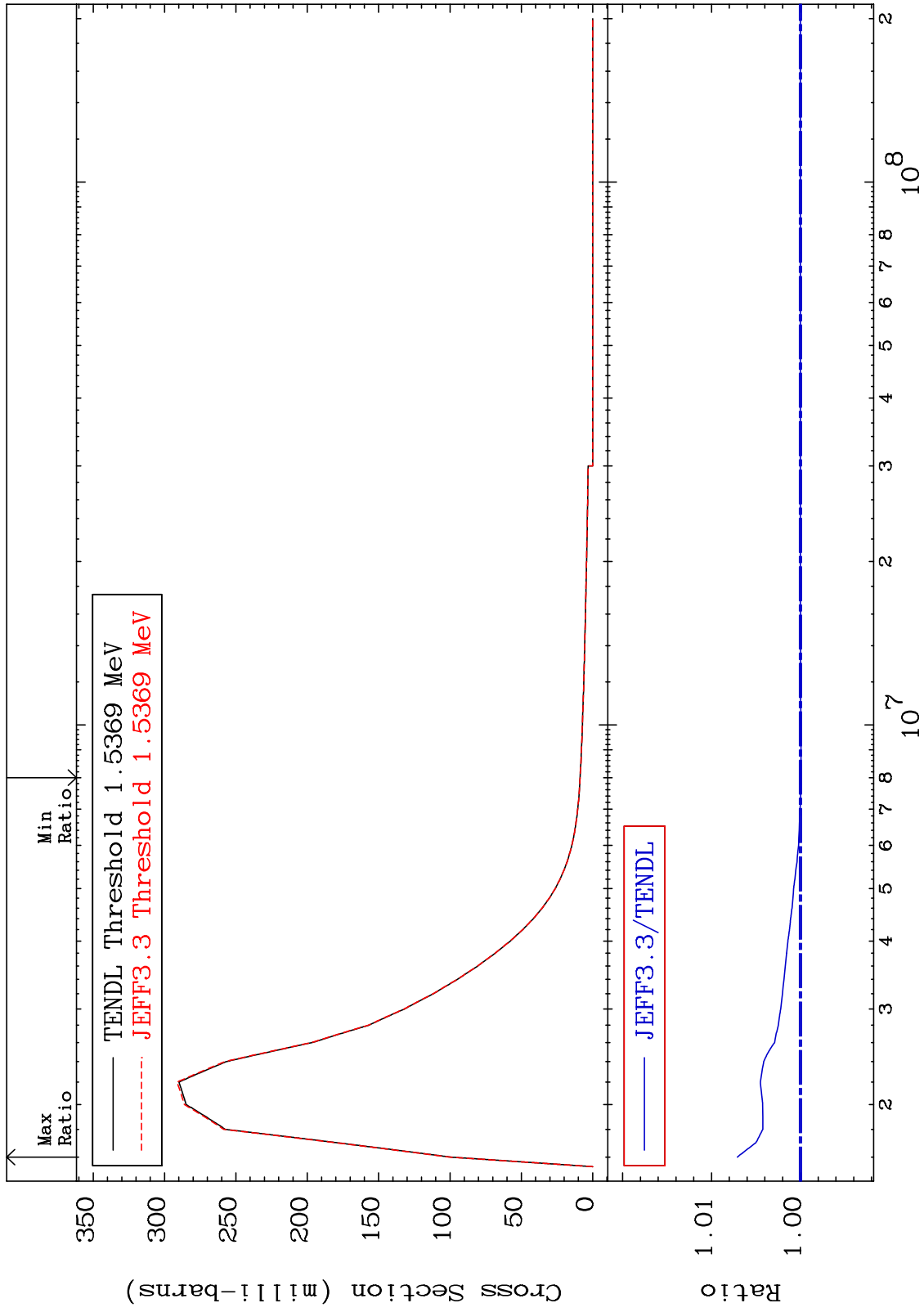
42-Mo-93
-0.202 To 0.487 %



MAT 4228

MT= 55 (n,n') Level
Cross Section

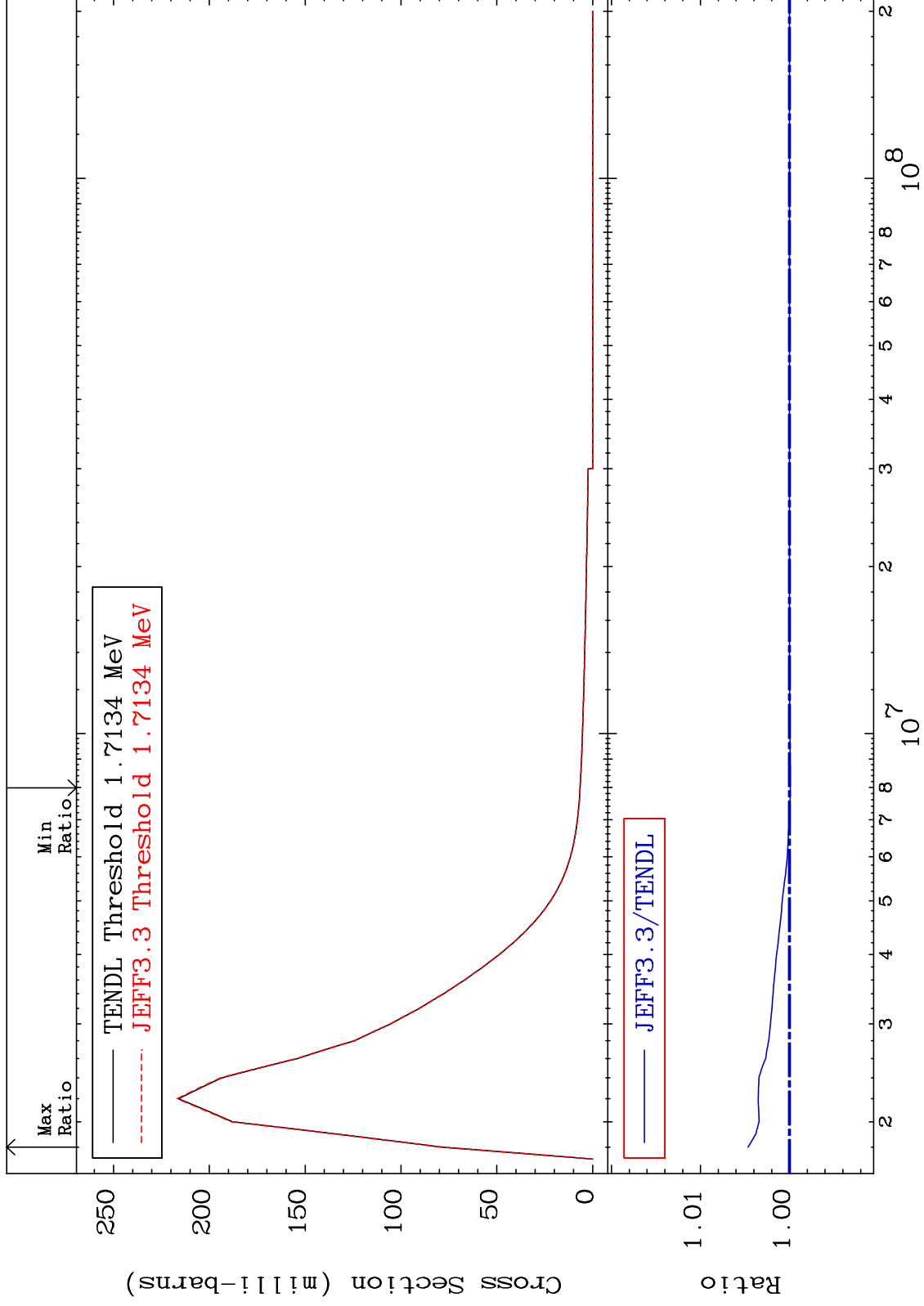
42-Mo-93
-0.008 To 0.711 %



MAT 4228

MT= 56 (n,n') Level
Cross Section

42-Mo-93
-0.010 To 0.465 %



23

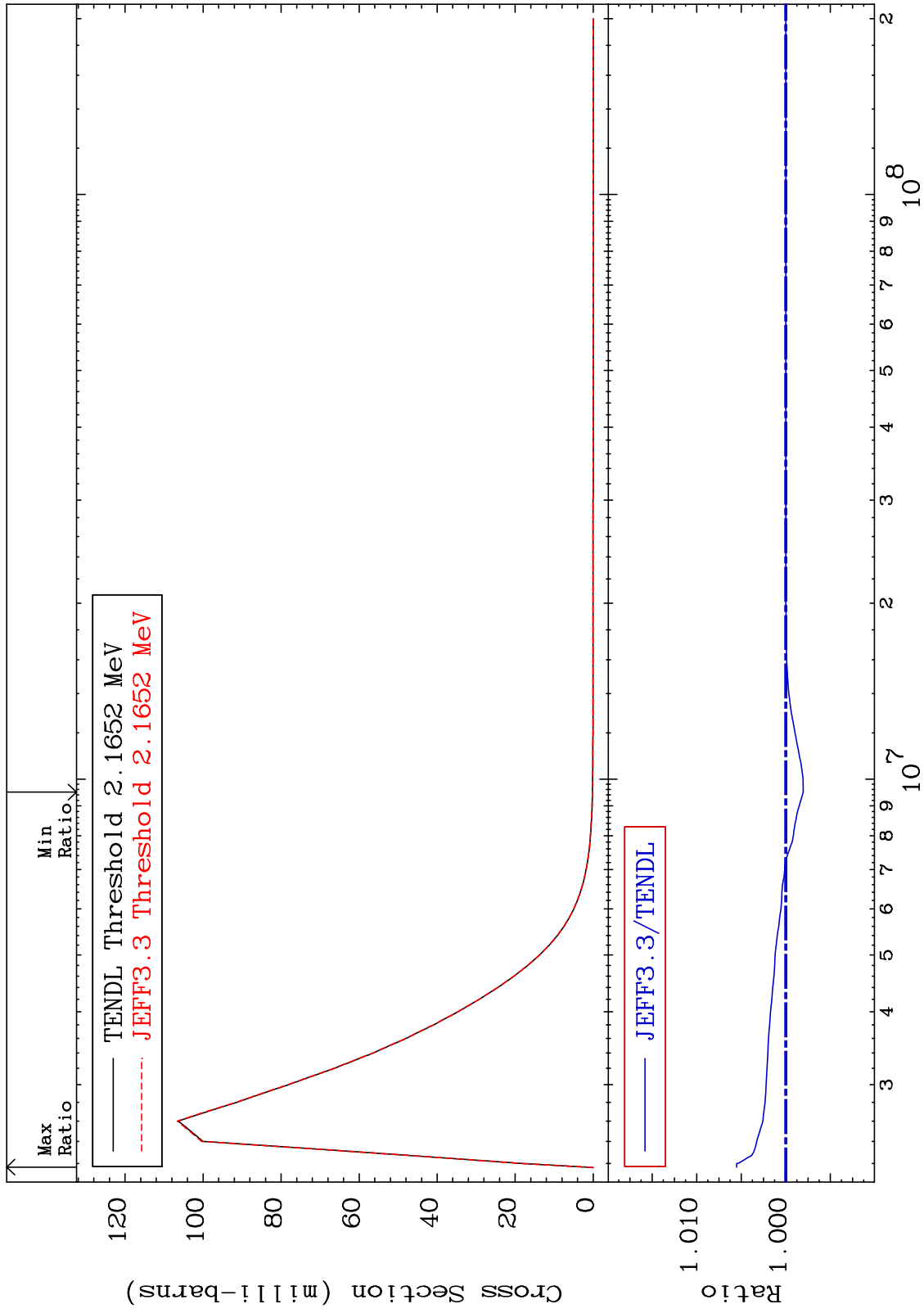
Incident Energy (eV)

42-Mo-93

MAT 4228

MT= 57 (n, n') Level
Cross Section

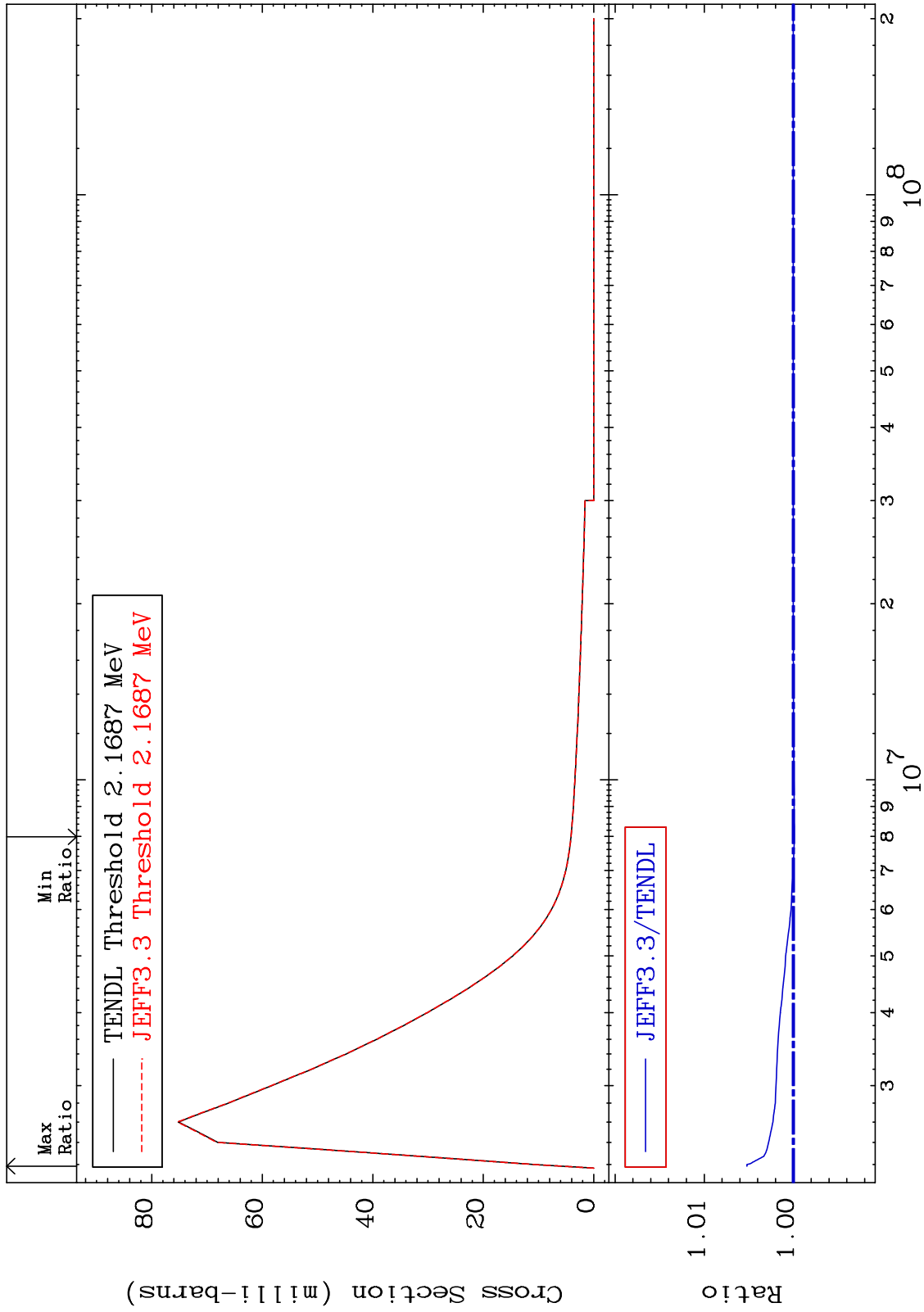
42-Mo-93
-0.195 To 0.552 %



MAT 4228

MT= 58 (n, n') Level
Cross Section

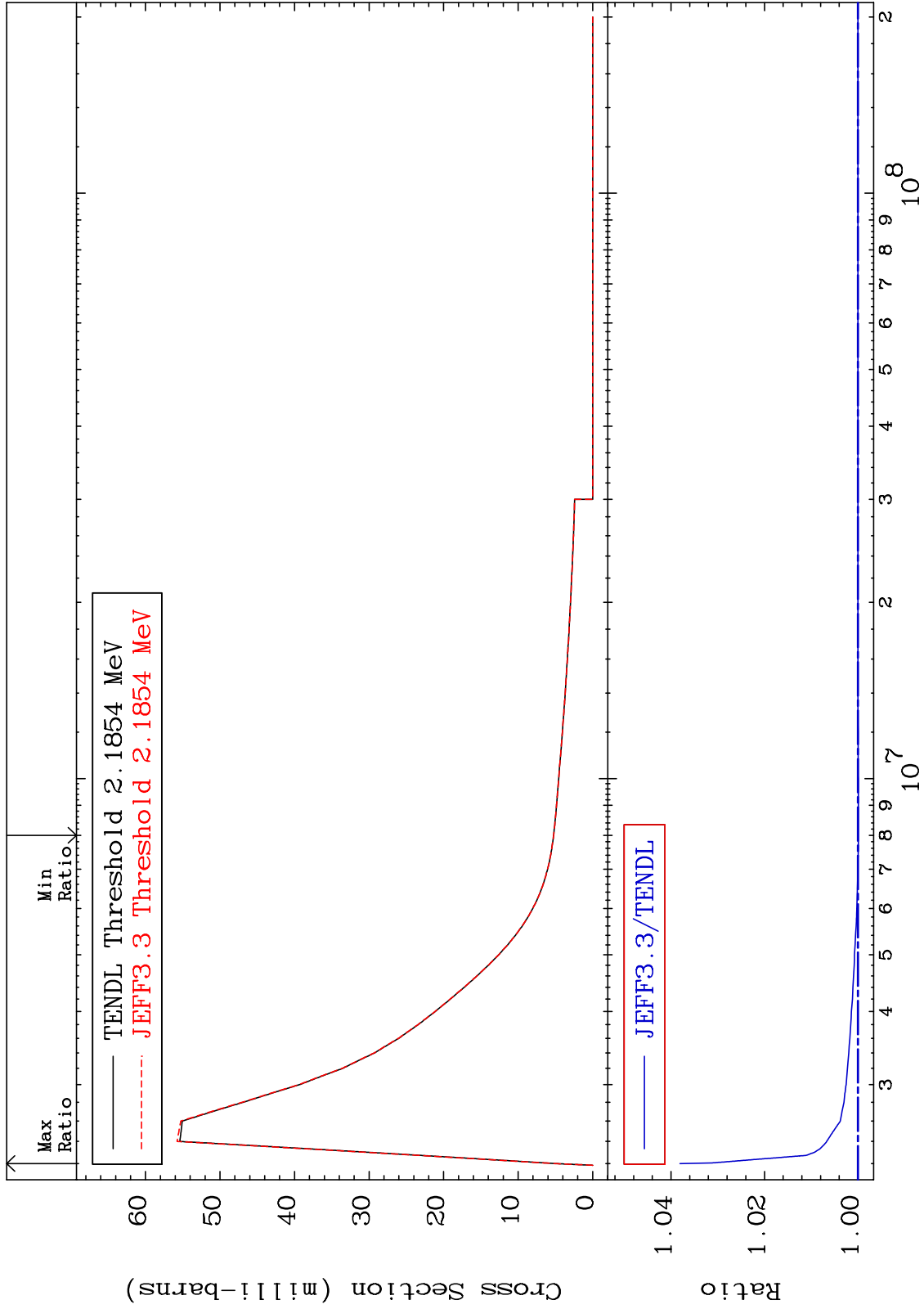
42-Mo-93
-0.010 To 0.522 %



MAT 4228

MT= 59 (n, n') Level
Cross Section

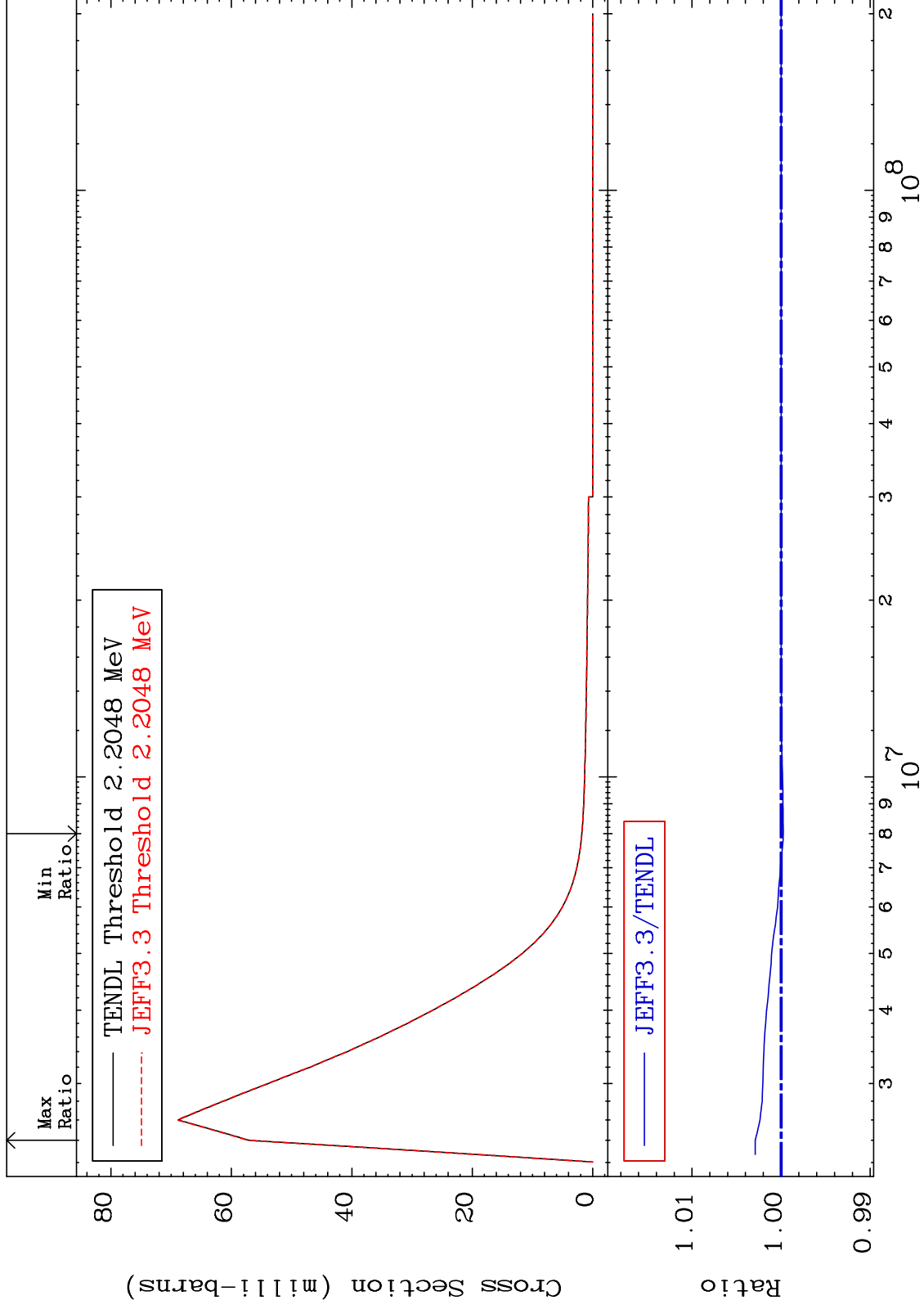
42-Mo-93
-0.010 To 3.807 %



MAT 4228

MT= 60 (n,n') Level
Cross Section

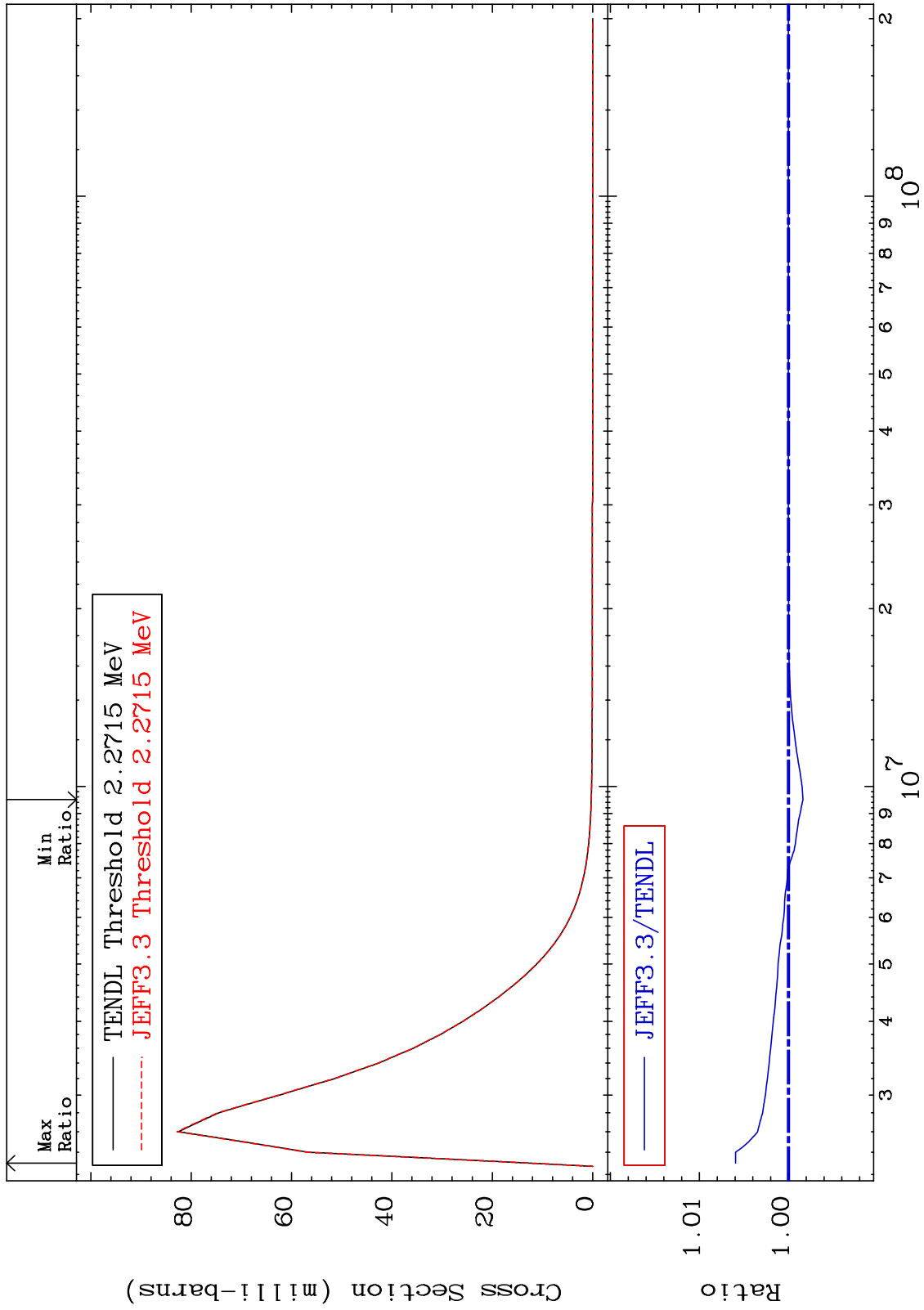
42-Mo-93
-0.024 To 0.291 %



MAT 4228

MT= 61 (n,n') Level
Cross Section

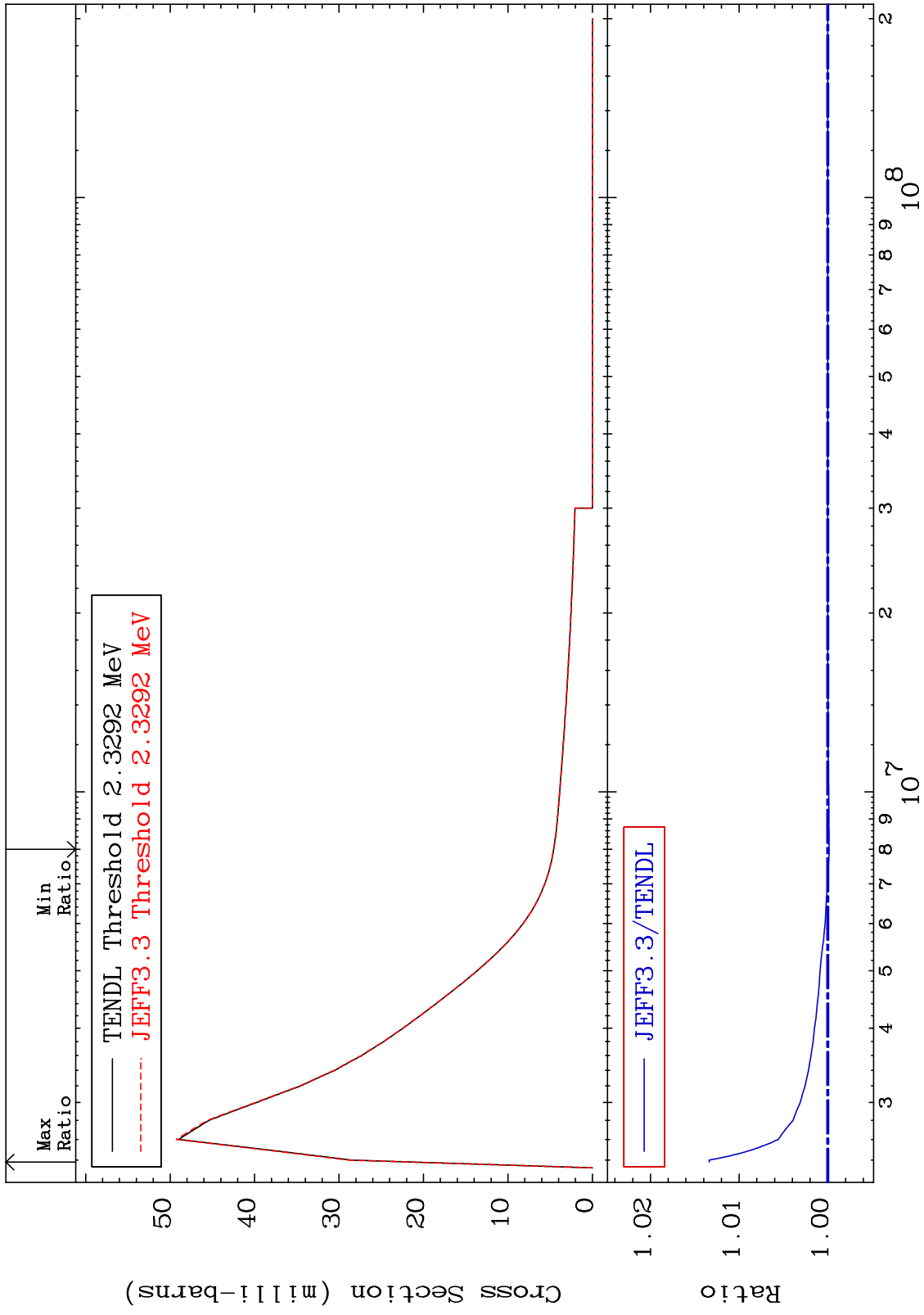
42-Mo-93
-0.163 To 0.595 %



MAT 4228

MT= 62 (n,n') Level
Cross Section

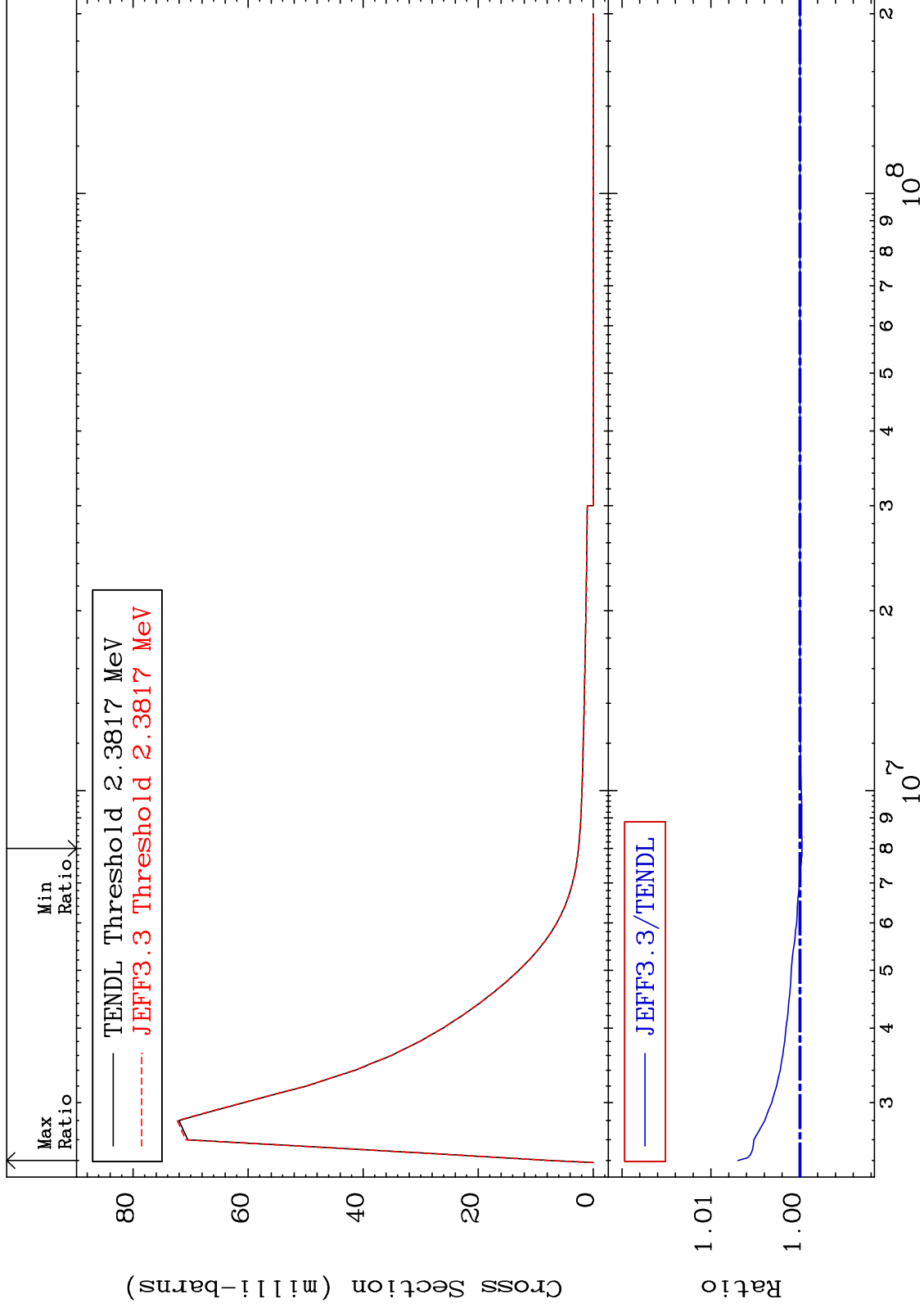
42-Mo-93
-0.014 To 1.338 %



MAT 4228

MT= 63 (n,n') Level
Cross Section

42-Mo-93
-0.022 To 0.698 %



30

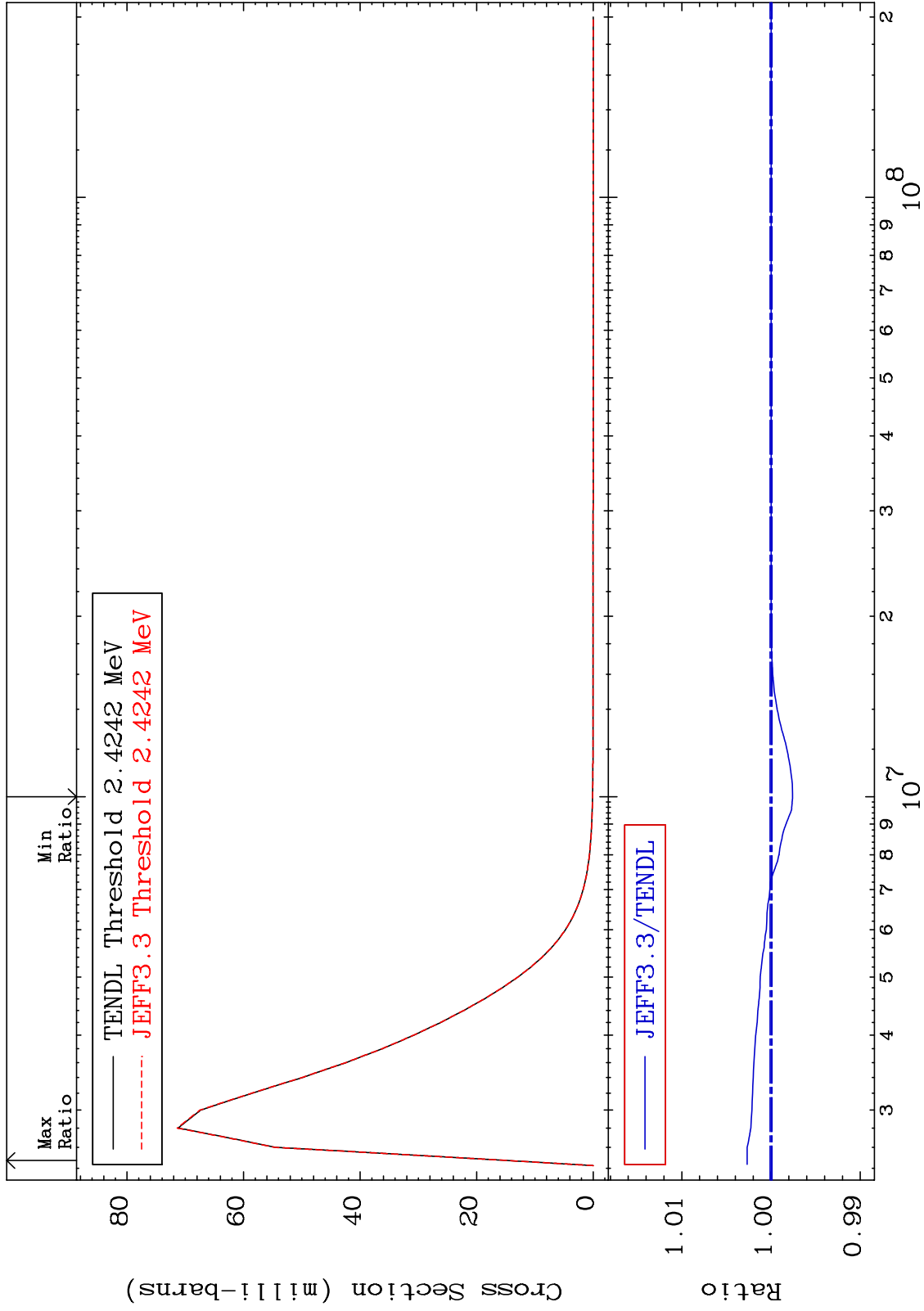
Incident Energy (eV)

42-Mo-93

MAT 4228

MT= 64 (n,n') Level
Cross Section

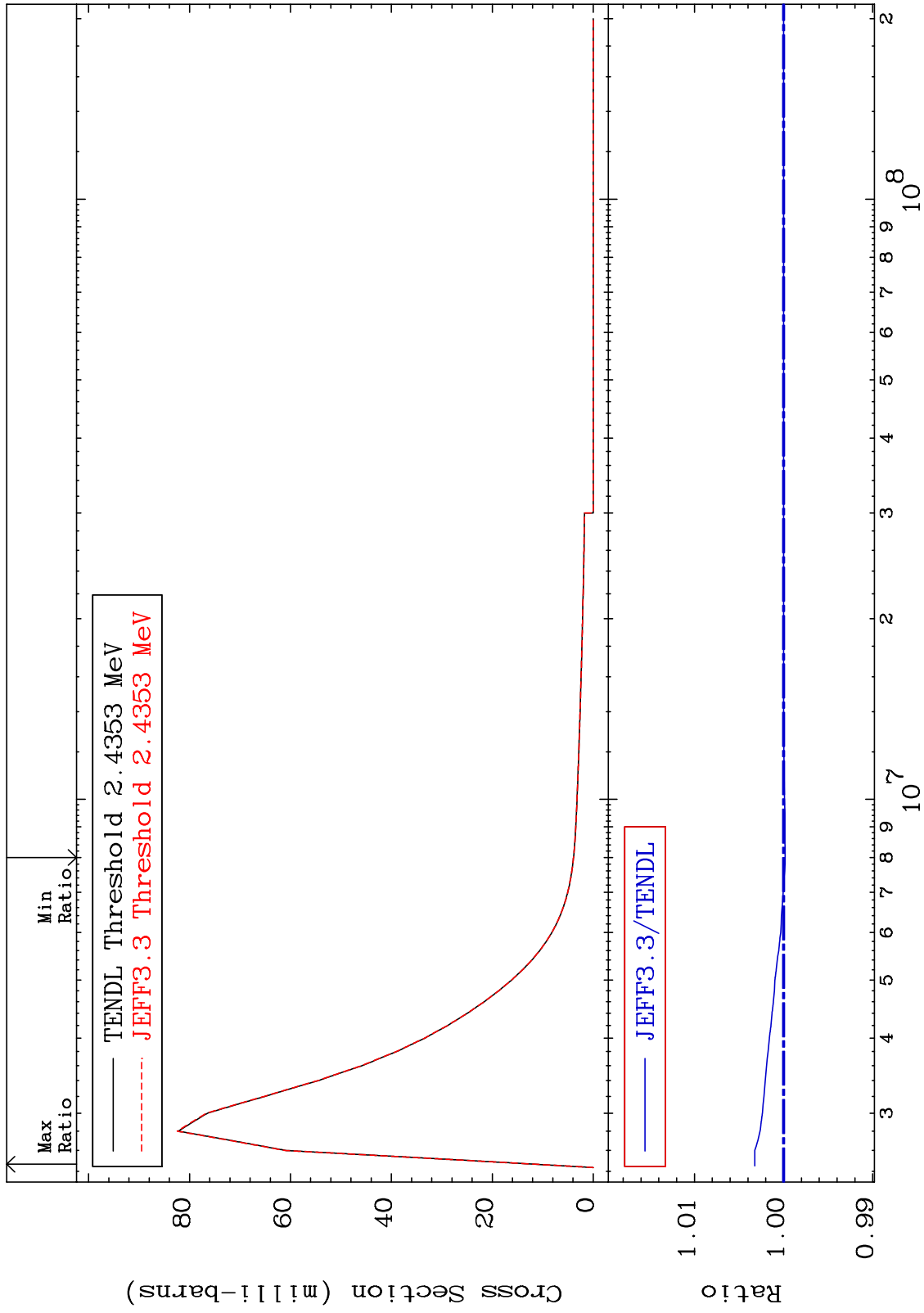
42-Mo-93
-0.242 To 0.268 %



MAT 4228

MT= 65 (n,n') Level
Cross Section

42-Mo-93
-0.017 To 0.324 %



32

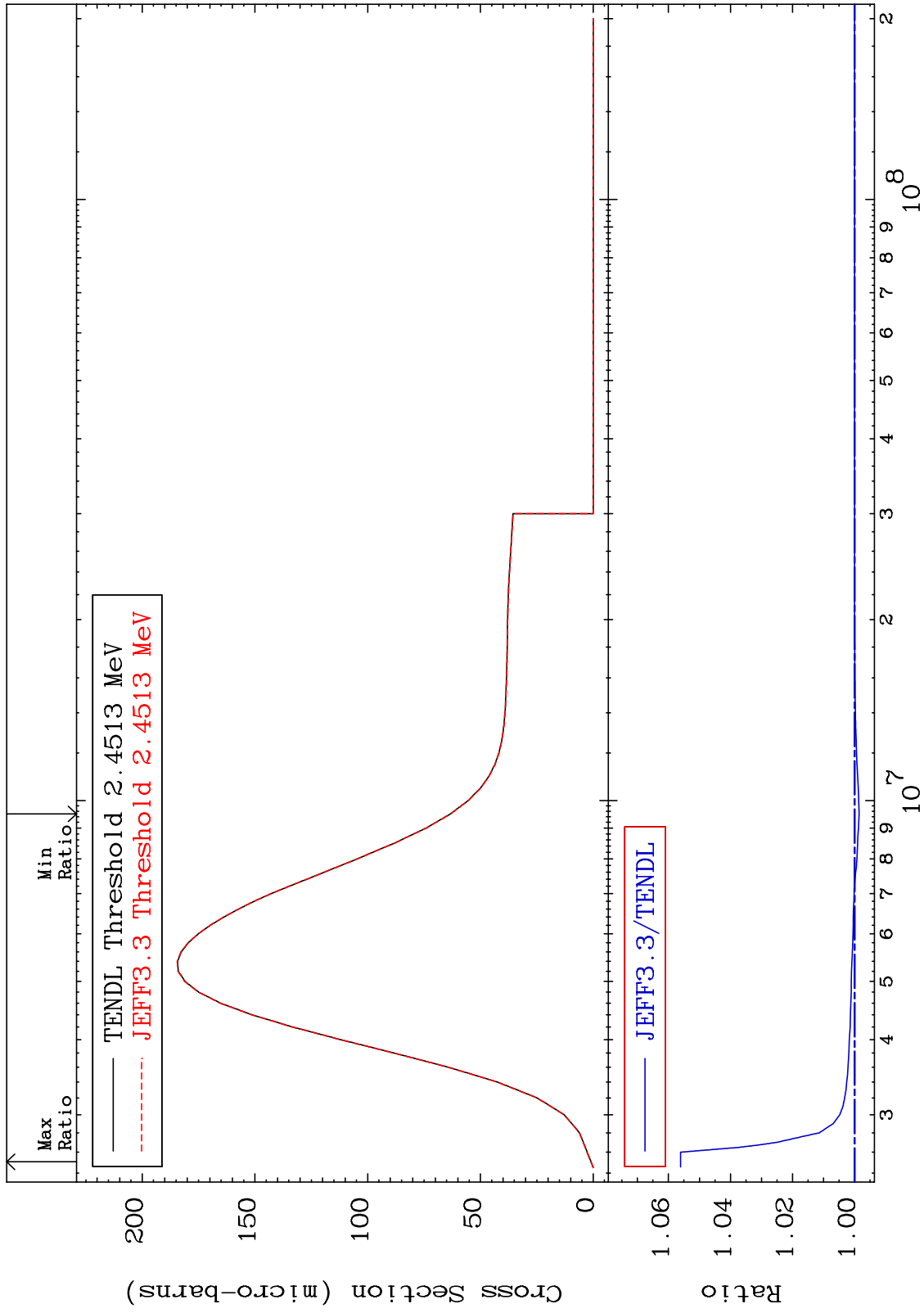
Incident Energy (eV)

42-Mo-93

MAT 4228

MT= 66 (n,n') Level
Cross Section

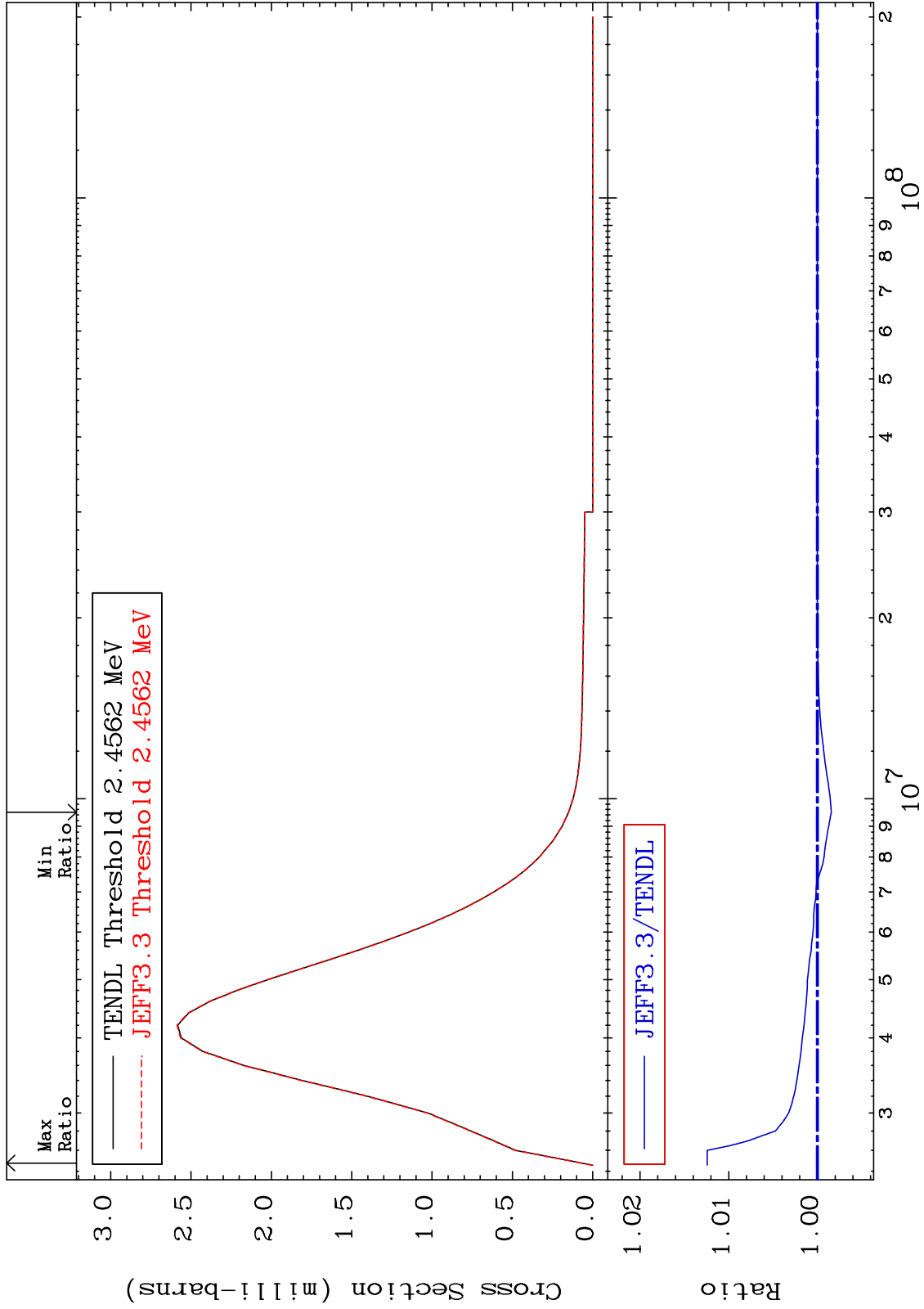
42-Mo-93
-0.148 To 5.606 %



MAT 4228

MT= 67 (n, n') Level
Cross Section

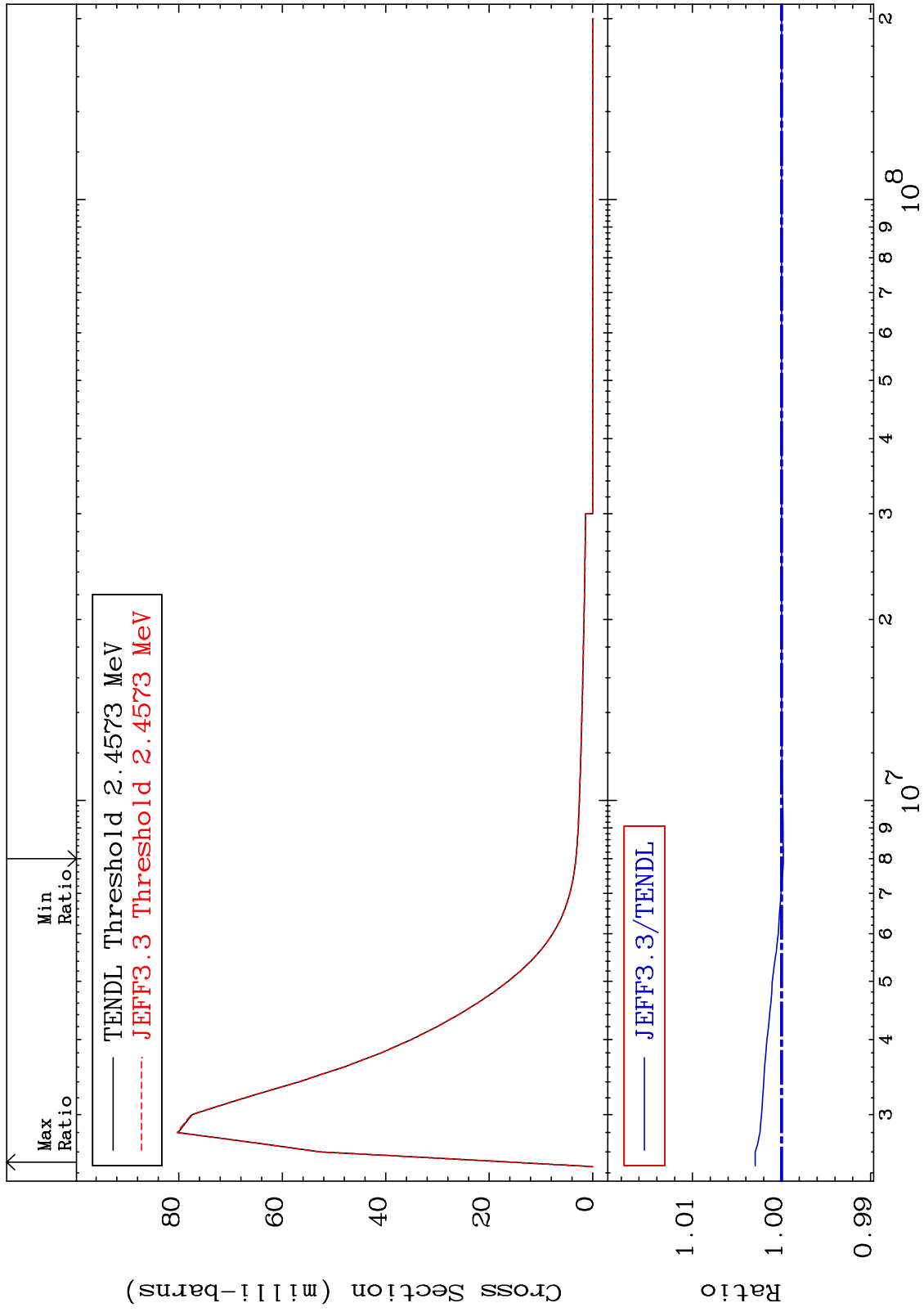
42-Mo-93
-0.156 To 1.243 %



MAT 4228

MT= 68 (n,n') Level
Cross Section

42-Mo-93
-0.020 To 0.297 %



35

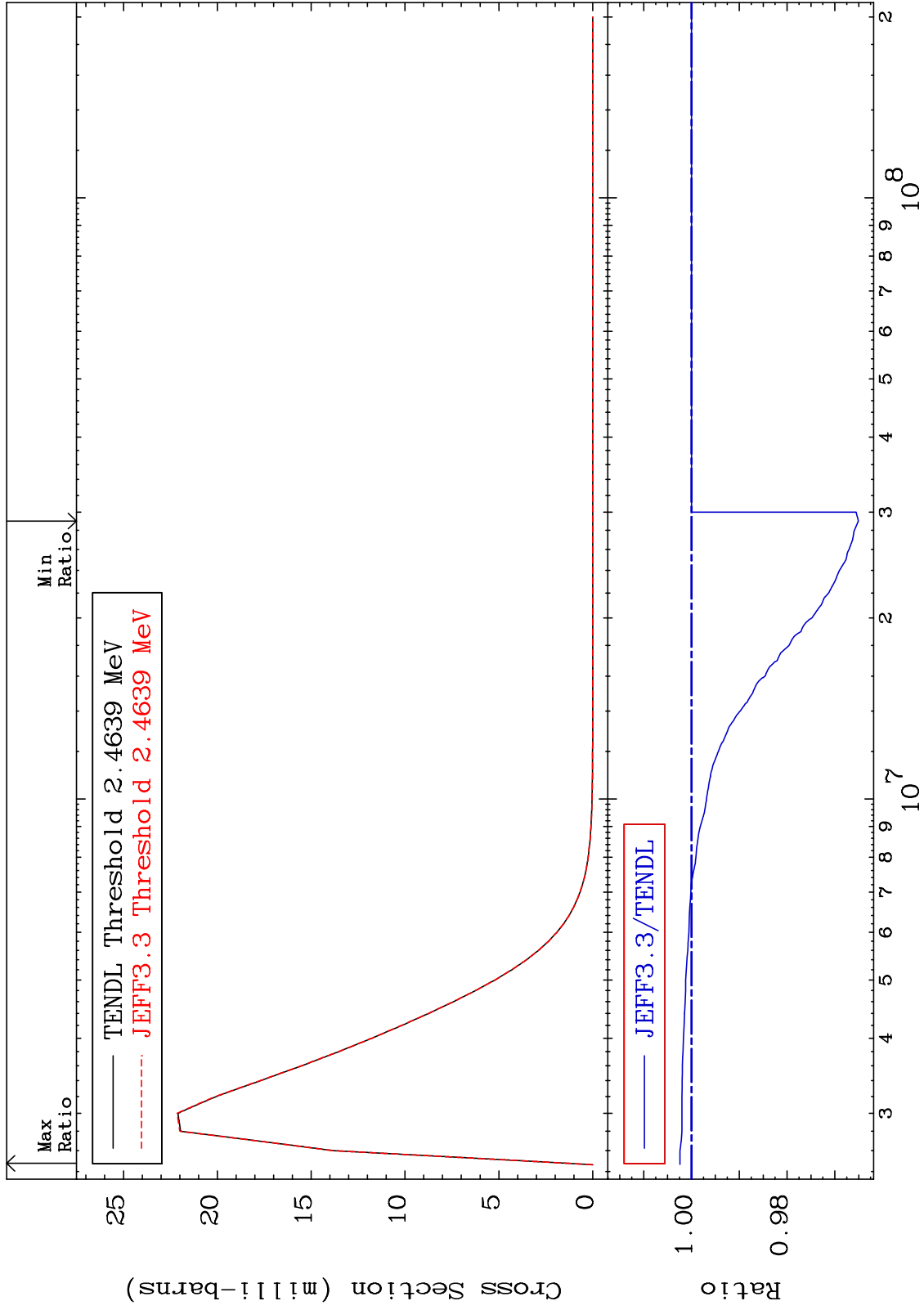
Incident Energy (eV)

42-Mo-93

MAT 4228

MT= 69 (n, n') Level
Cross Section

42-Mo-93
-3.494 To 0.240 %



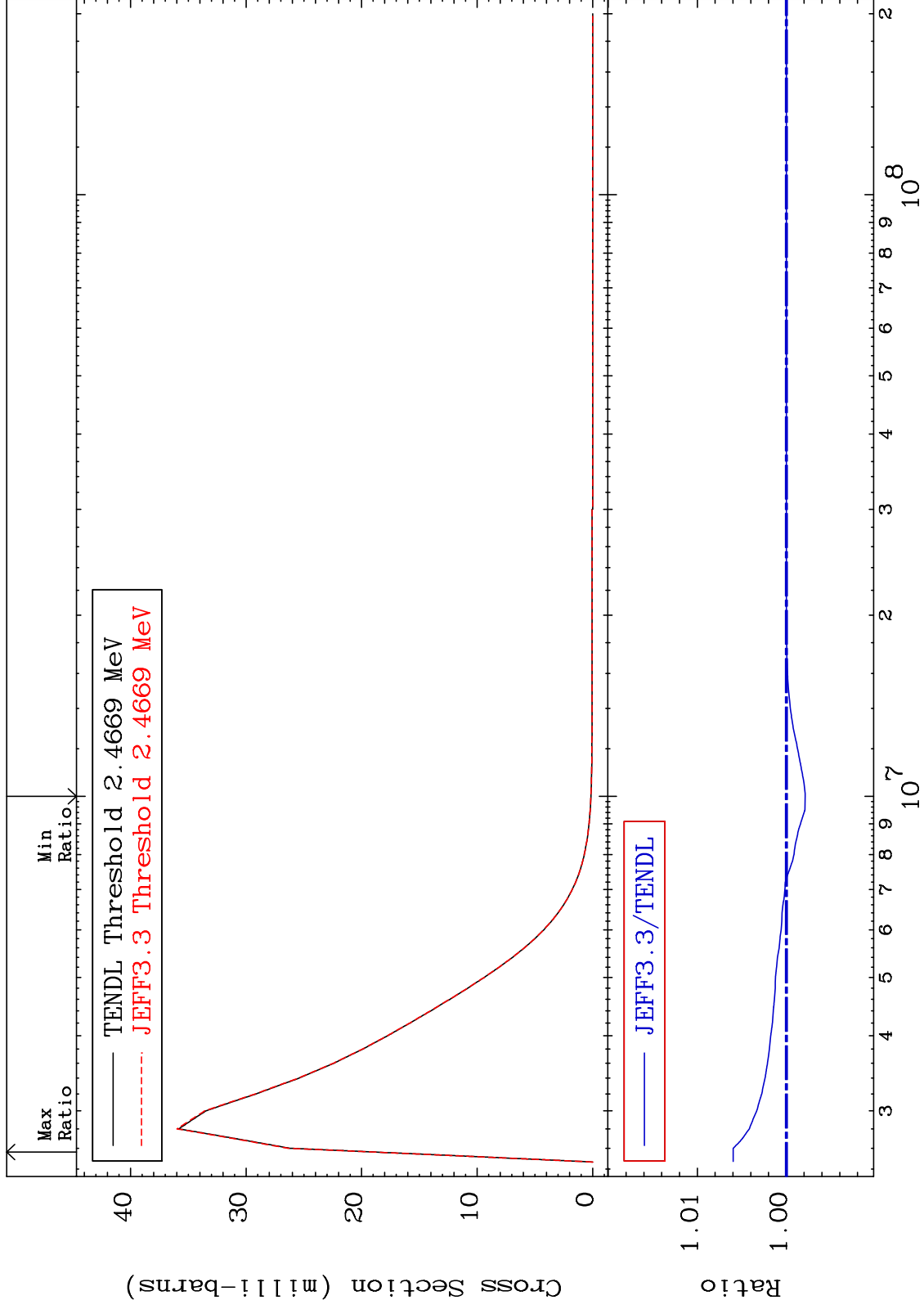
36

42-Mo-93

MAT 4228

MT= 70 (n,n') Level
Cross Section

42-Mo-93
-0.212 To 0.597 %



37

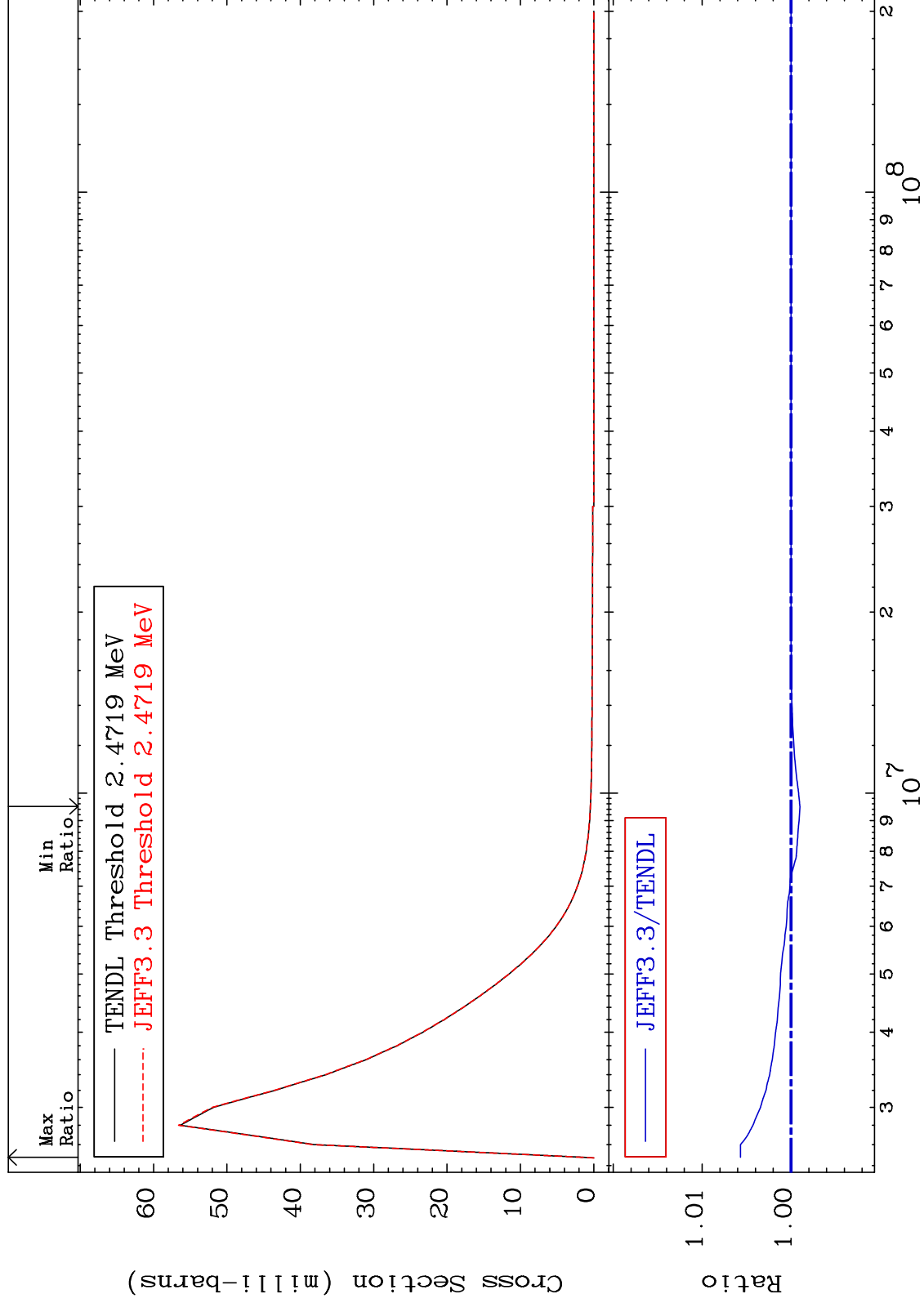
Incident Energy (eV)

42-Mo-93

MAT 4228

MT= 71 (n,n') Level
Cross Section

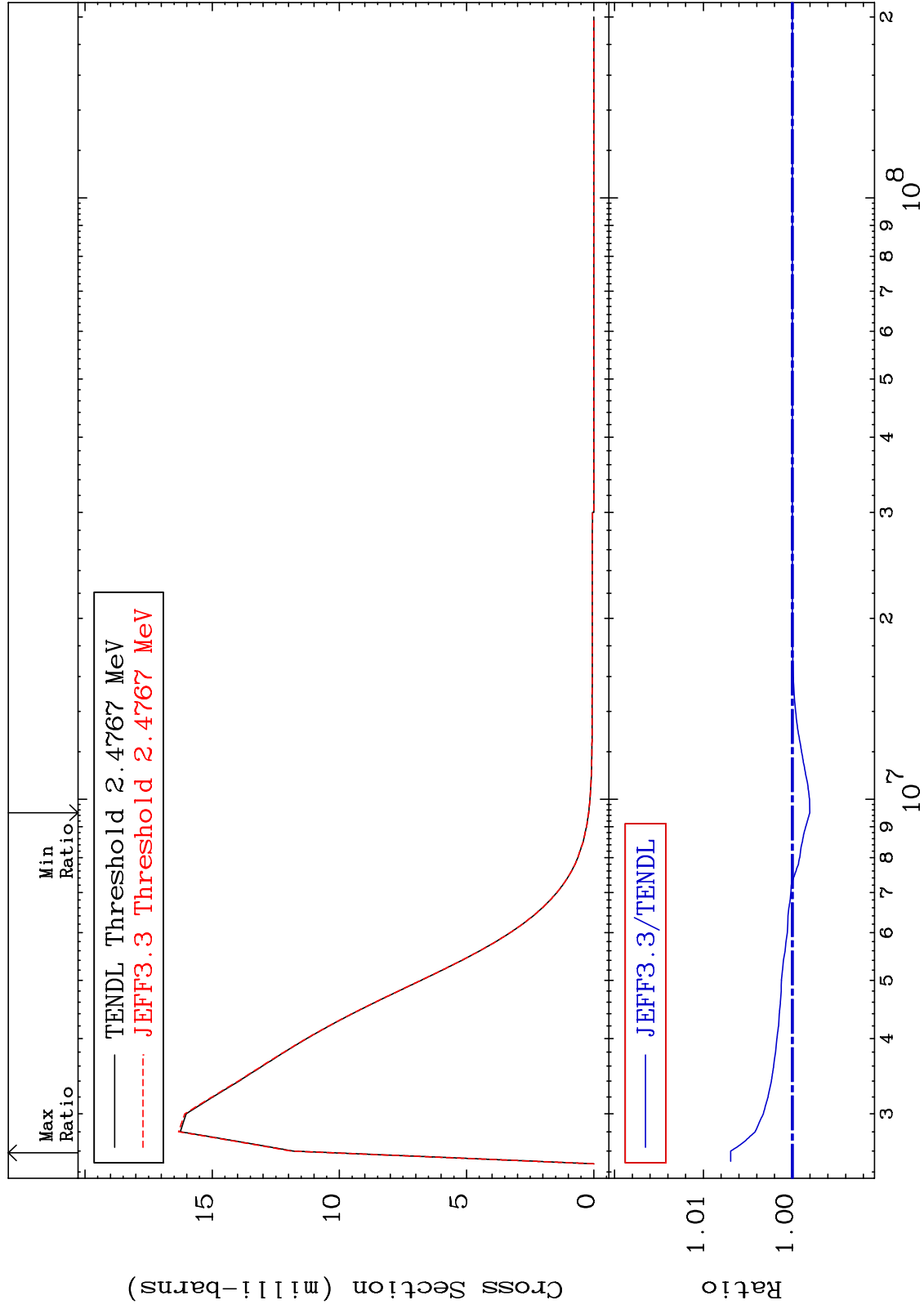
42-Mo-93
-0.100 To 0.569 %



MAT 4228

MT= 72 (n,n') Level
Cross Section

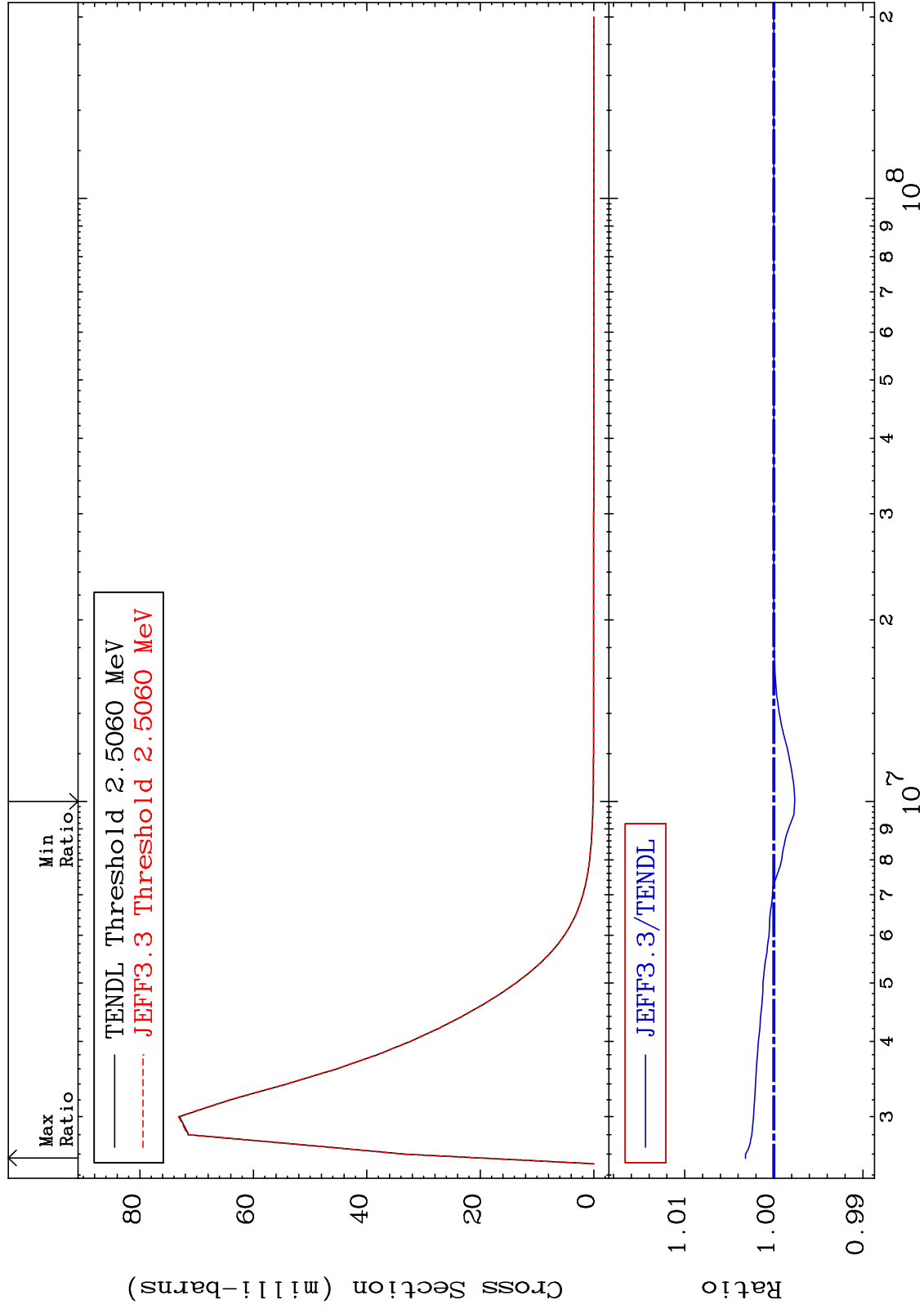
42-Mo-93
-0.196 To 0.694 %



MAT 4228

MT= 73 (n,n') Level
Cross Section

42-Mo-93
-0.235 To 0.316 %



40

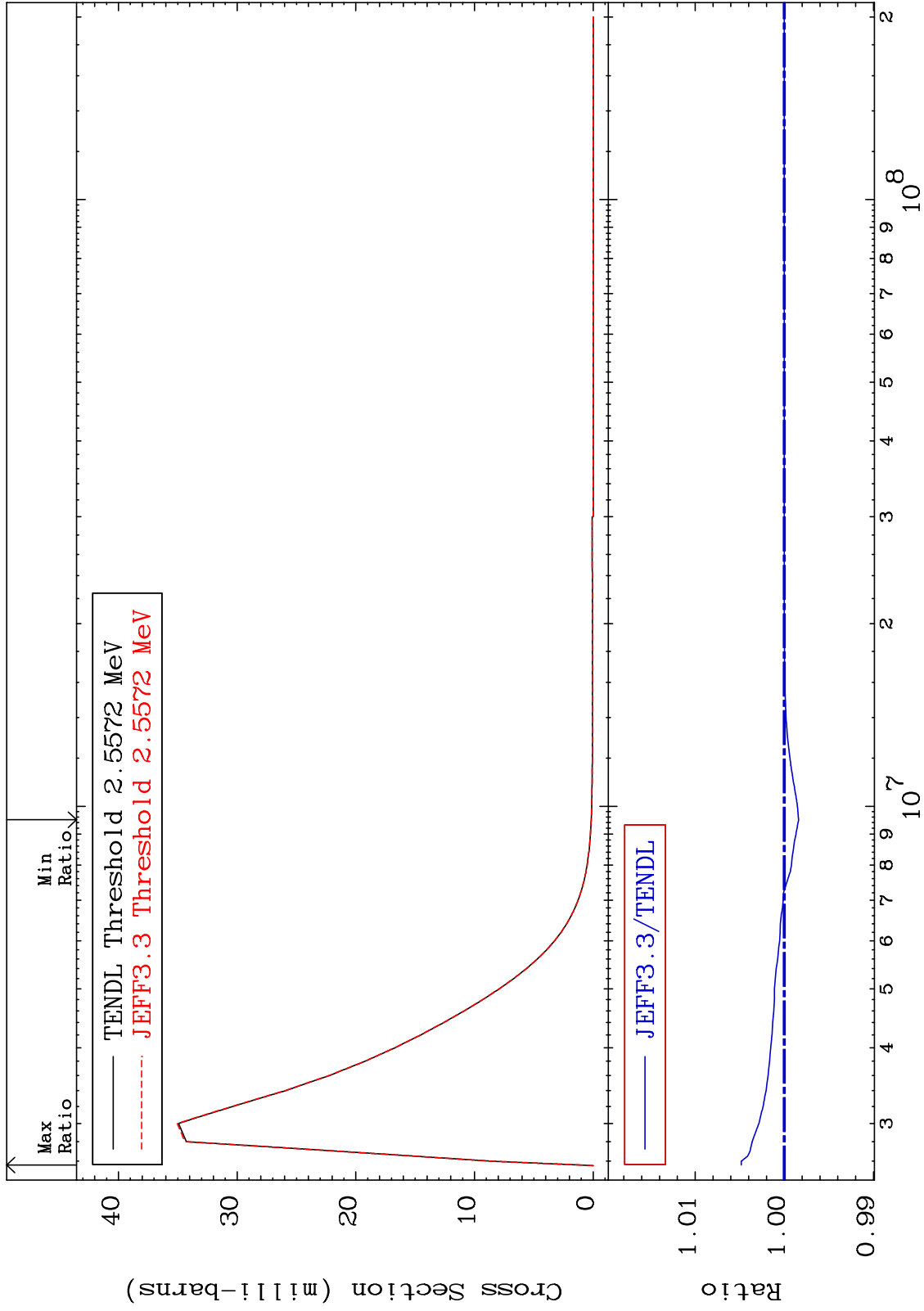
Incident Energy (eV)

42-Mo-93

MAT 4228

MT= 74 (n,n') Level
Cross Section

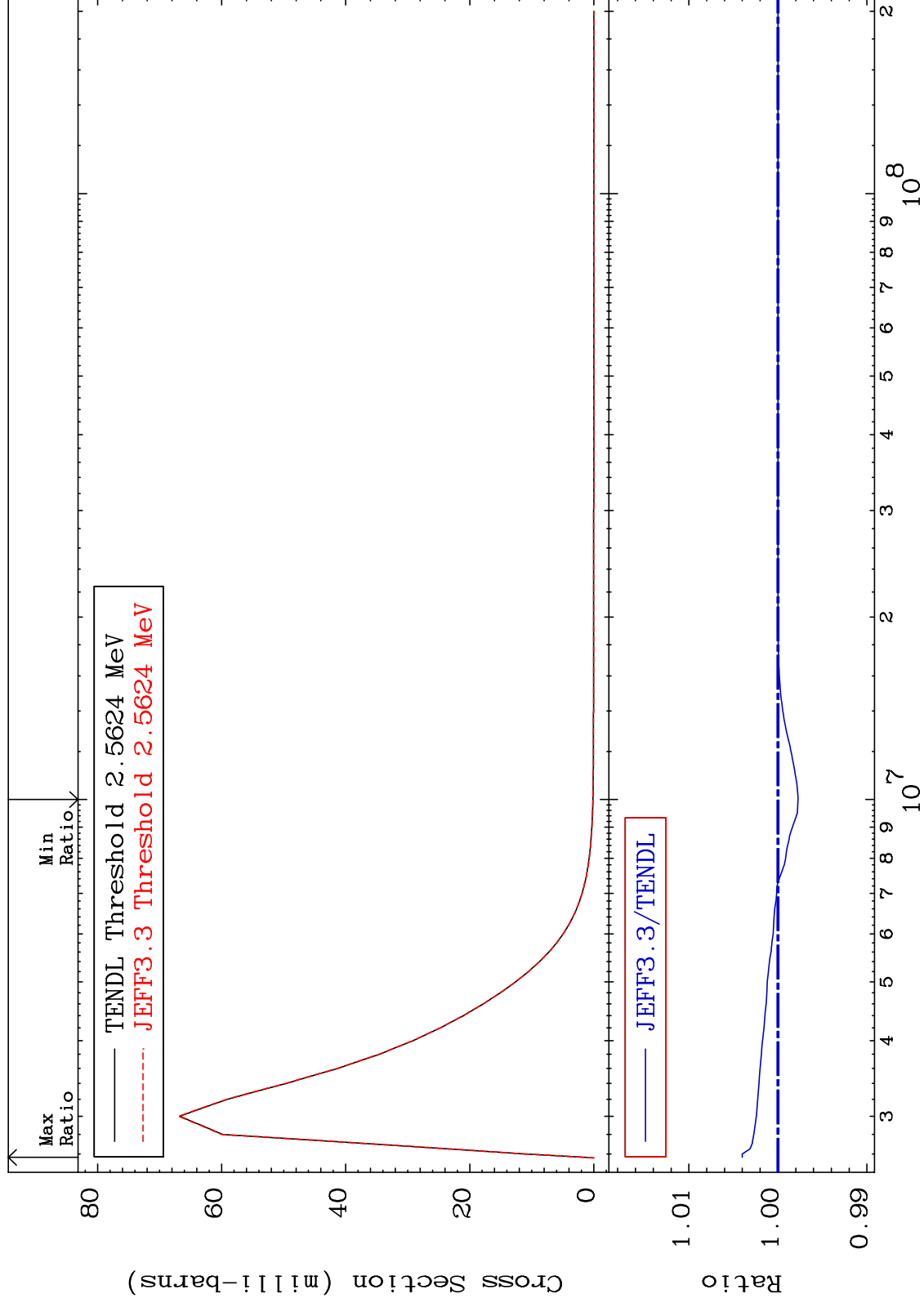
42-Mo-93
-0.160 To 0.483 %



MAT 4228

MT= 75 (n,n') Level
Cross Section

42-Mo-93
-0.226 To 0.400 %



42

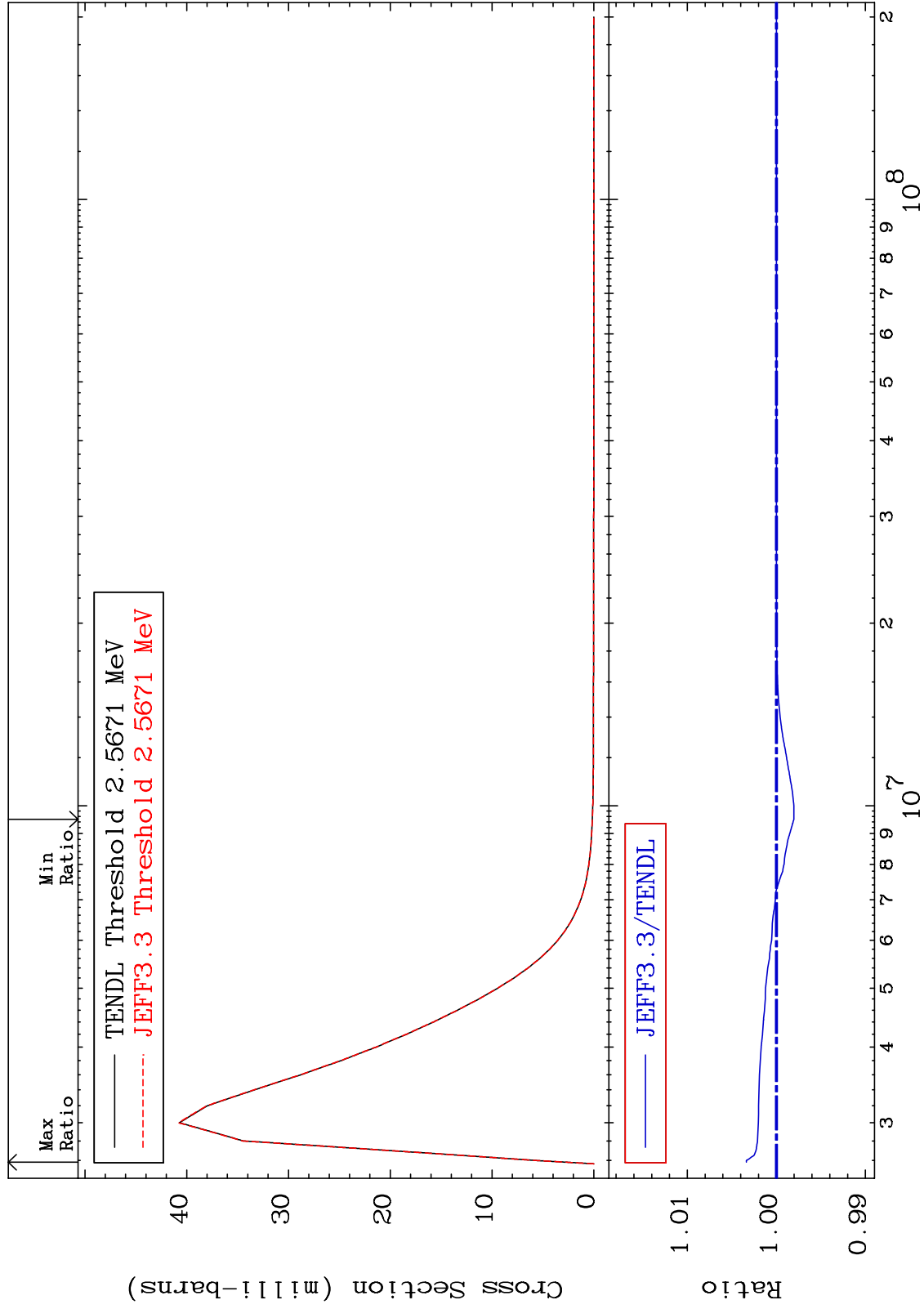
Incident Energy (eV)

42-Mo-93

MAT 4228

MT= 76 (n,n') Level
Cross Section

42-Mo-93
-0.197 To 0.336 %



43

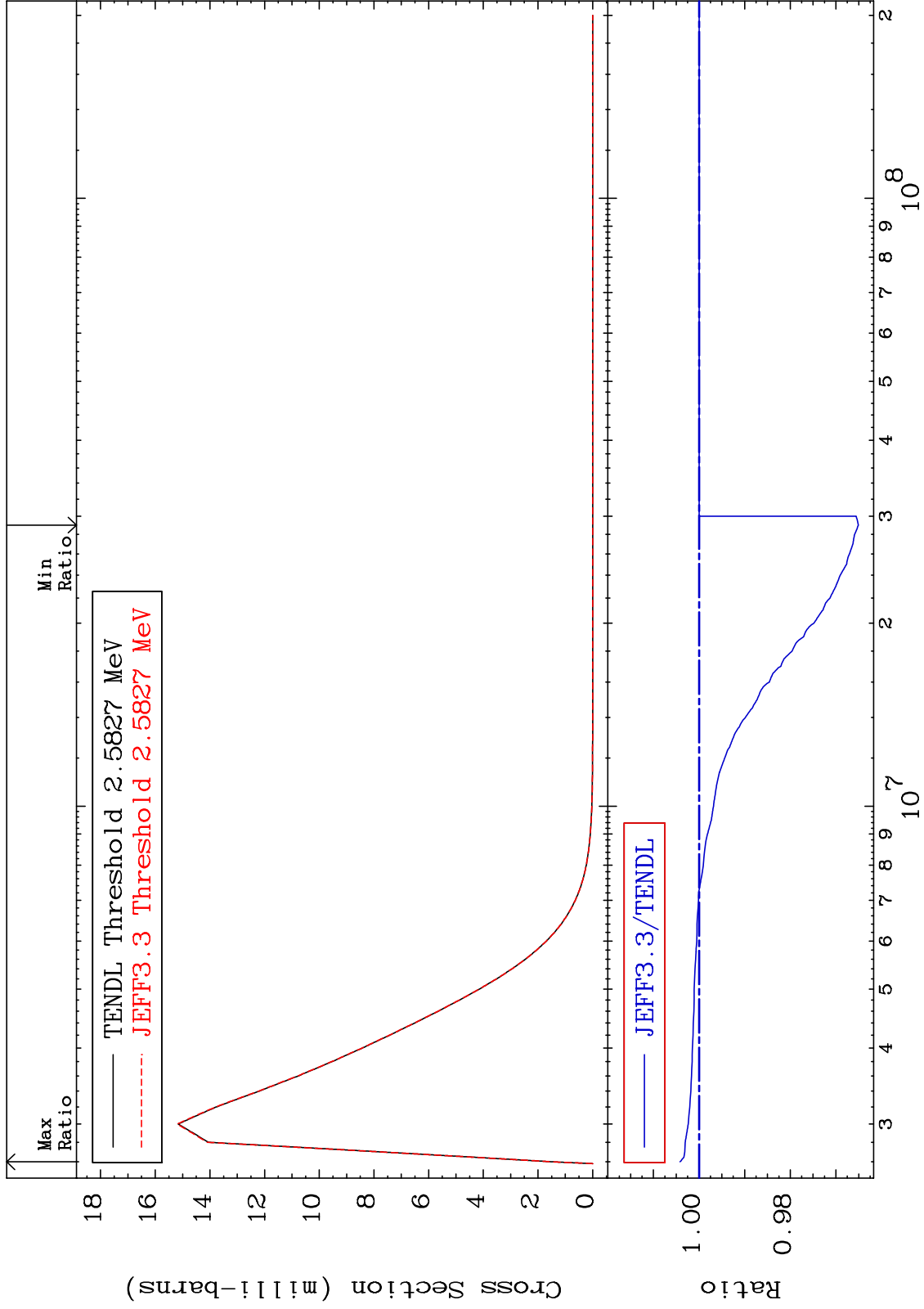
Incident Energy (eV)

42-Mo-93

MAT 4228

MT= 77 (n, n') Level
Cross Section

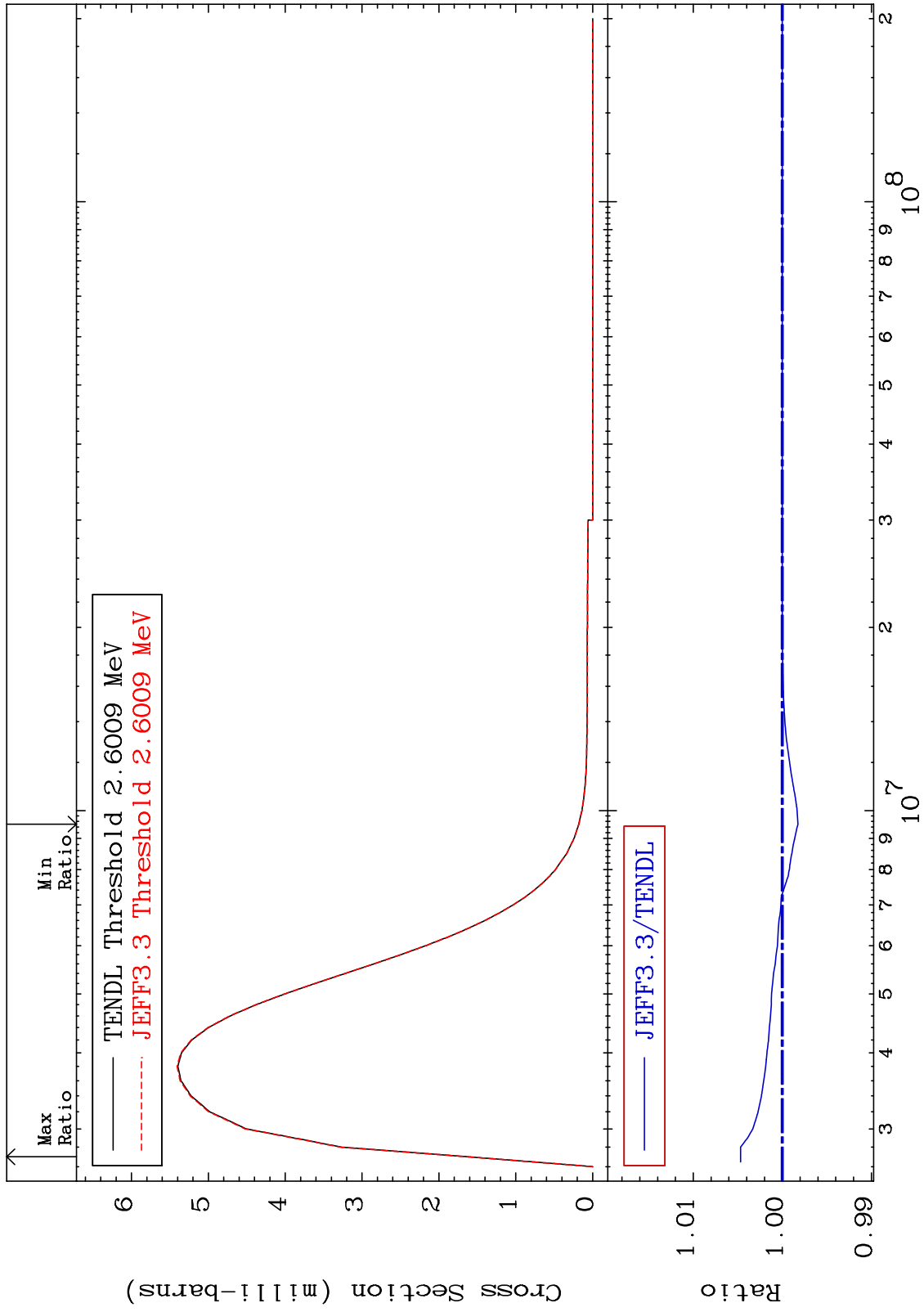
42-Mo-93
-3.494 To 0.417 %



MAT 4228

MT= 78 (n,n') Level
Cross Section

42-Mo-93
-0.175 To 0.469 %



45

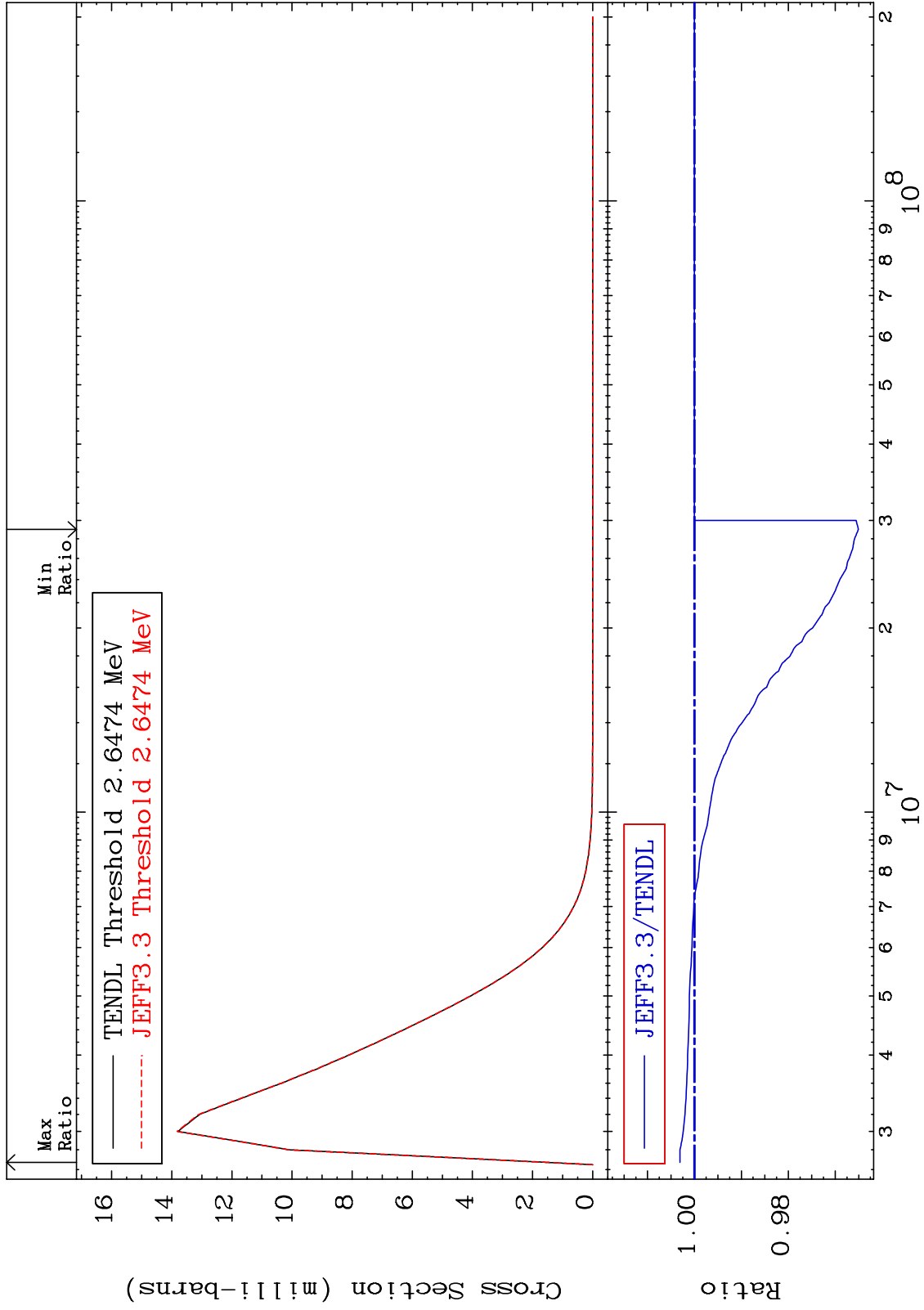
Incident Energy (eV)

42-Mo-93

MAT 4228

MT= 79 (n, n') Level
Cross Section

42-Mo-93
-3.494 To 0.307 %



46

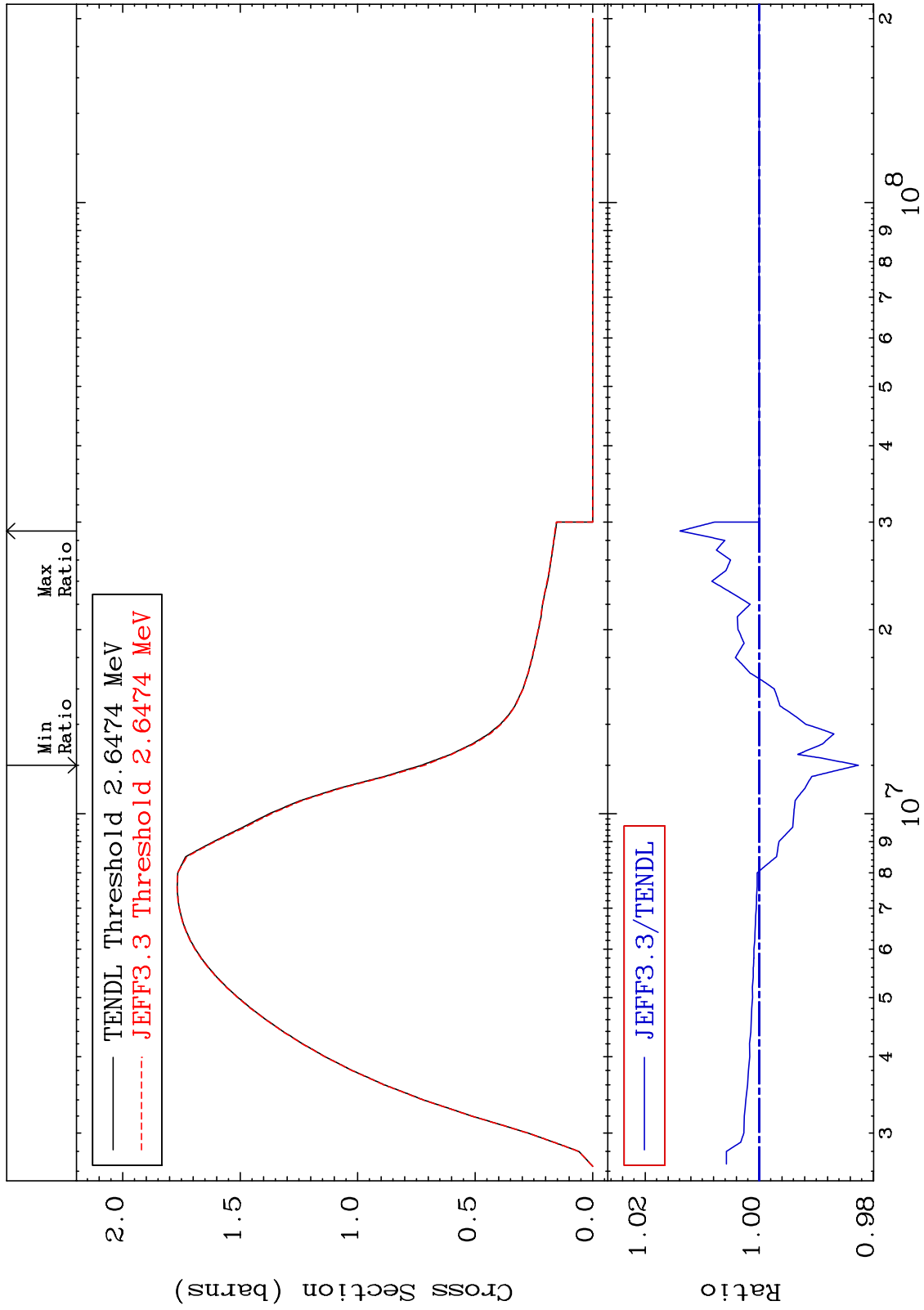
Incident Energy (eV)

42-Mo-93

MAT 4228

(n, n') Continuum
Cross Section

42-Mo-93
-1.742 To 1.390 %



47

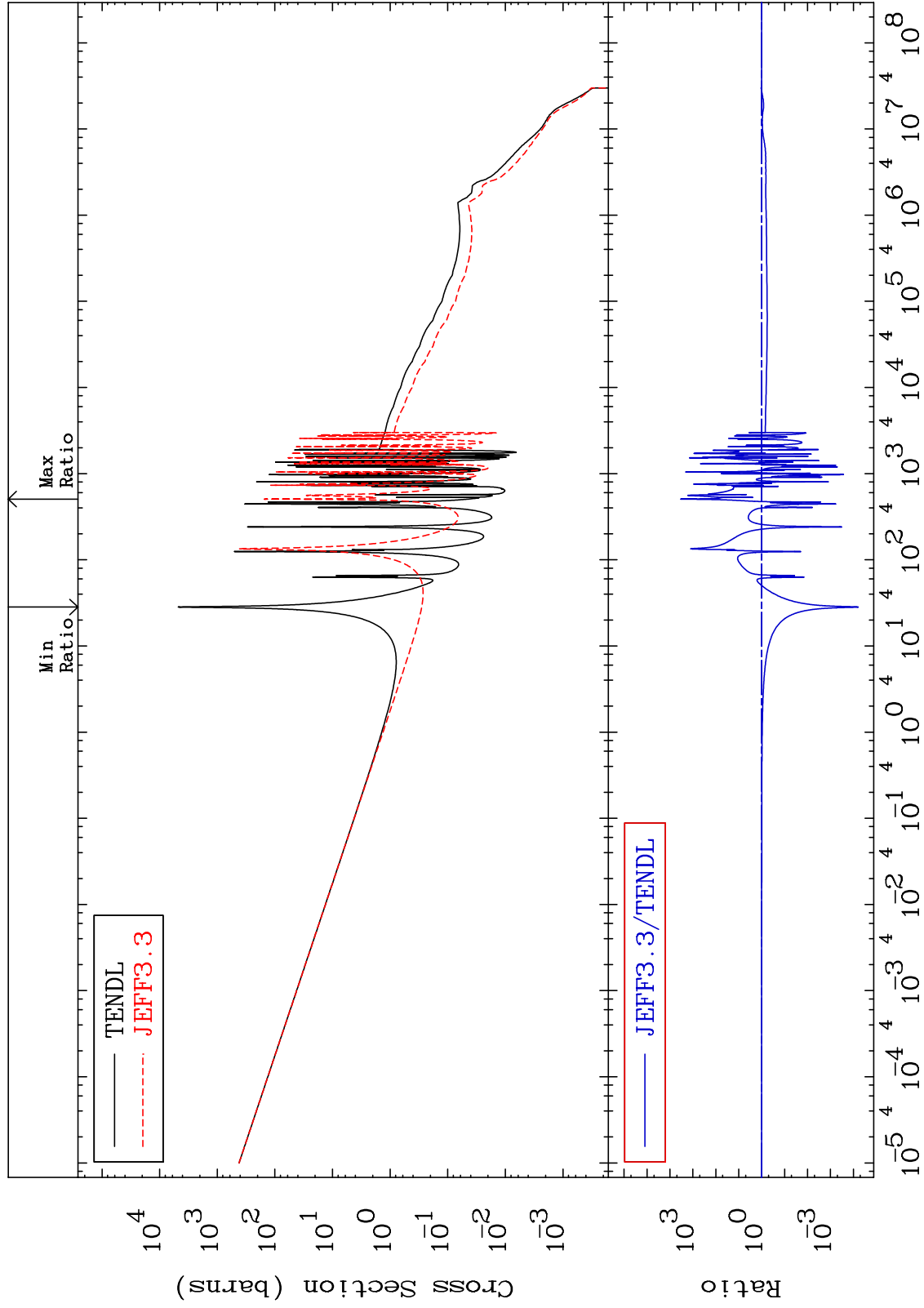
Incident Energy (eV)

42-Mo-93

MAT 4228

(n, γ)
Cross Section

42-Mo-93
-99.99 To 9999. %



48

Incident Energy (eV)

42-Mo-93

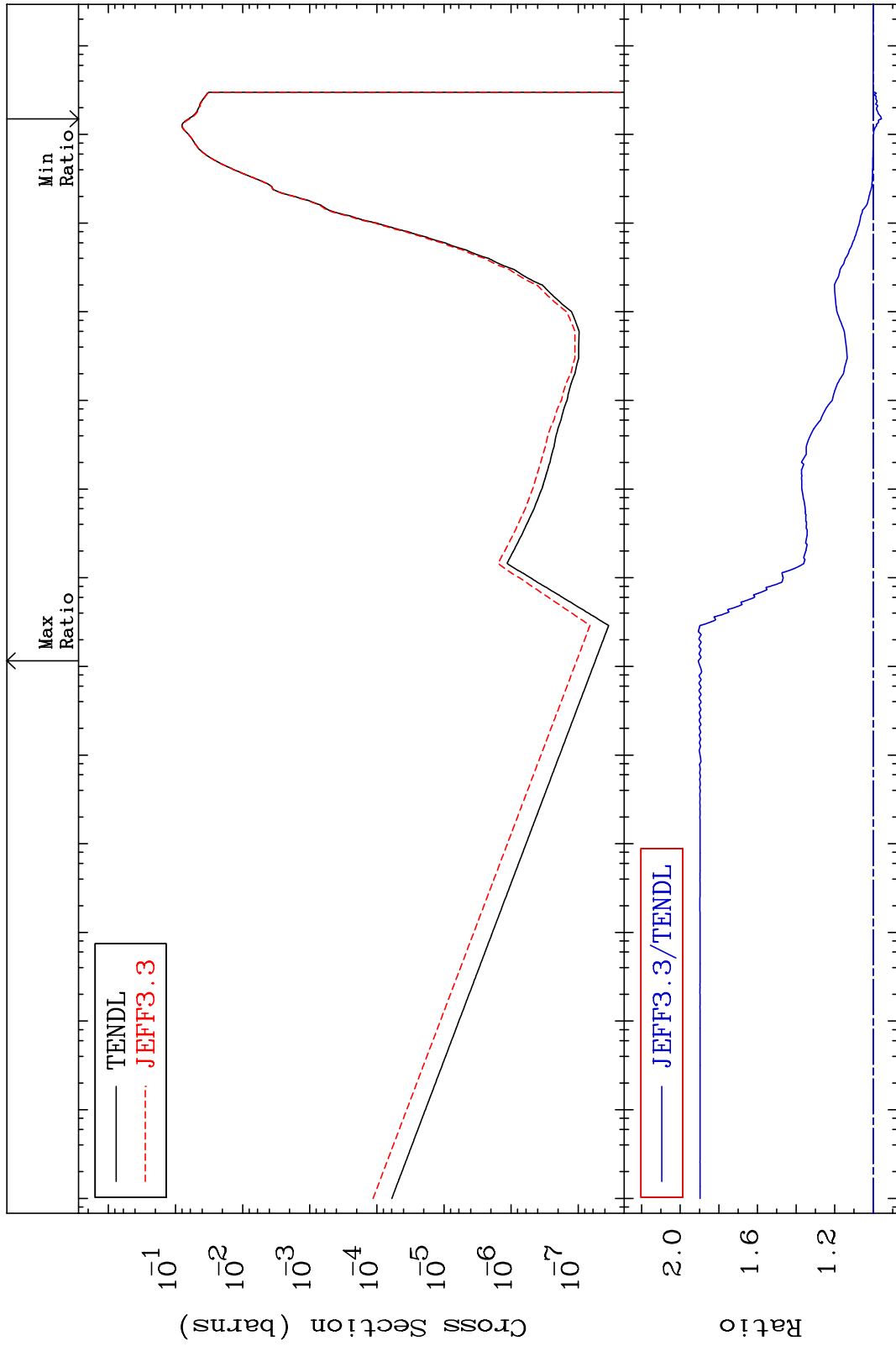
MAT 4228

(n,p)

42-Mo-93

Cross Section

-4.271 To 90.61 %



49

Incident Energy (eV)

42-Mo-93

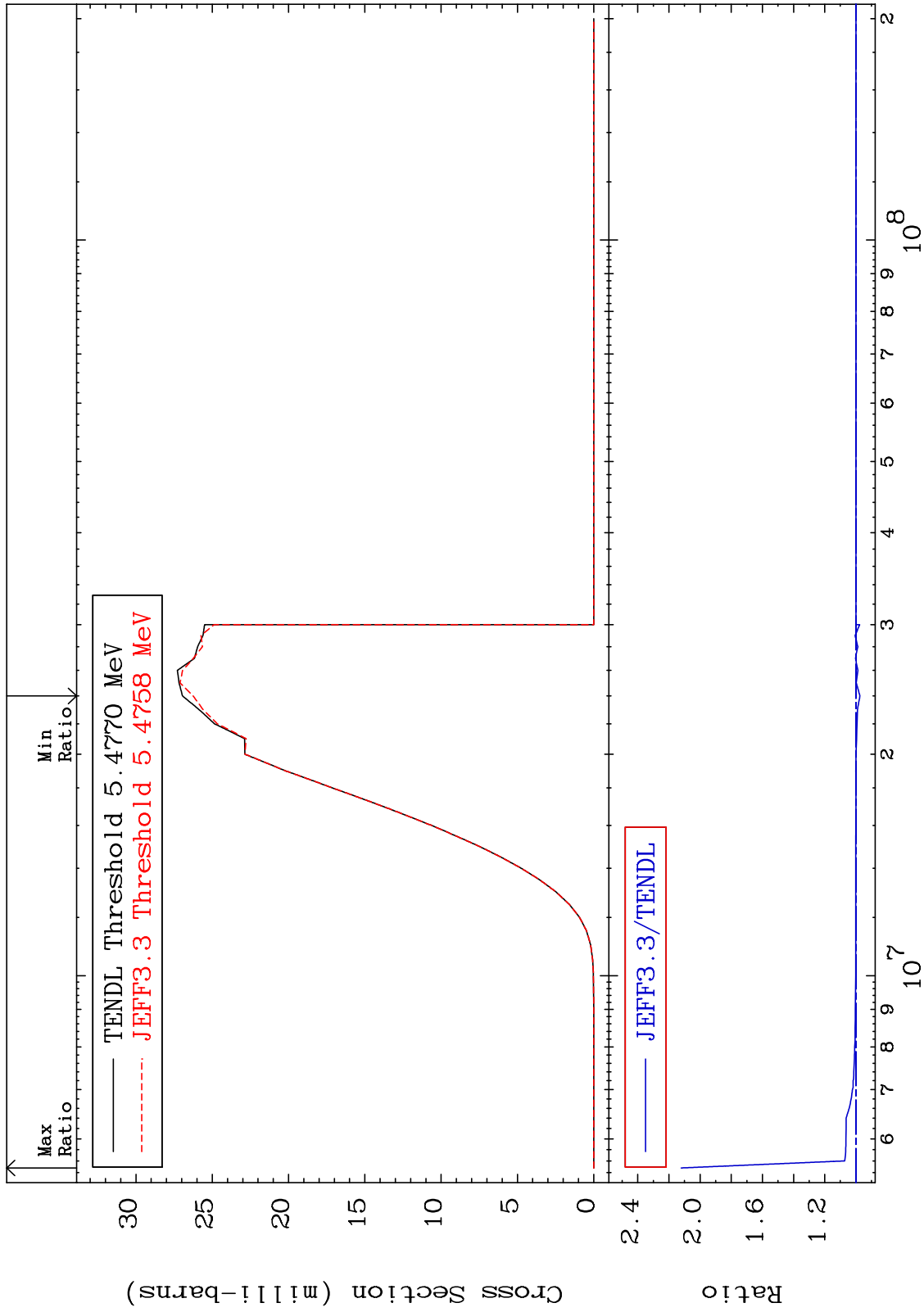
MAT 4228

(n, d)

42-Mo-93

Cross Section

-2.587 To 112.1 %



50

Incident Energy (eV)

42-Mo-93

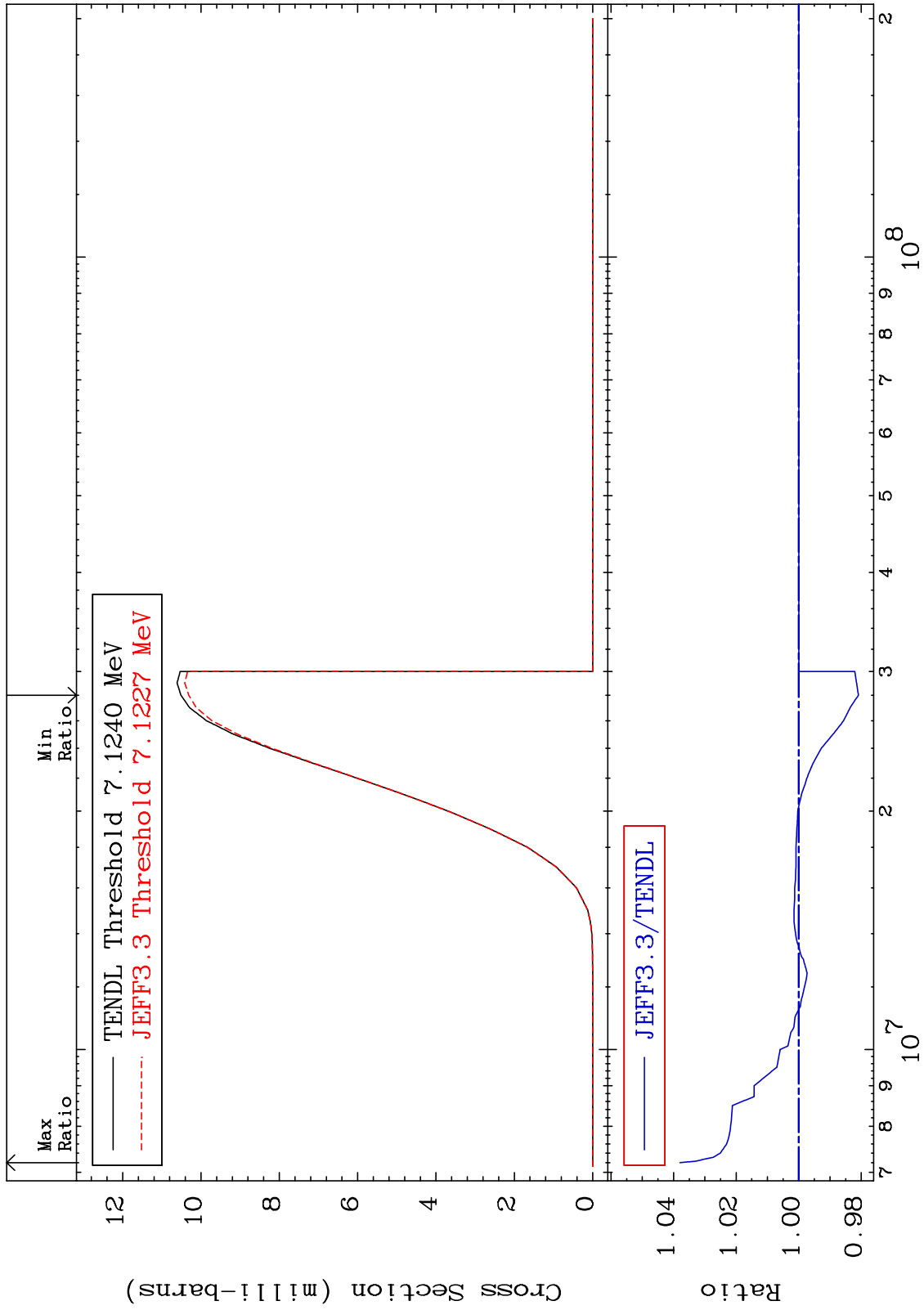
MAT 4228

(n, t)

42-Mo-93

Cross Section

-1.908 To 3.794 %



51

Incident Energy (eV)

42-Mo-93

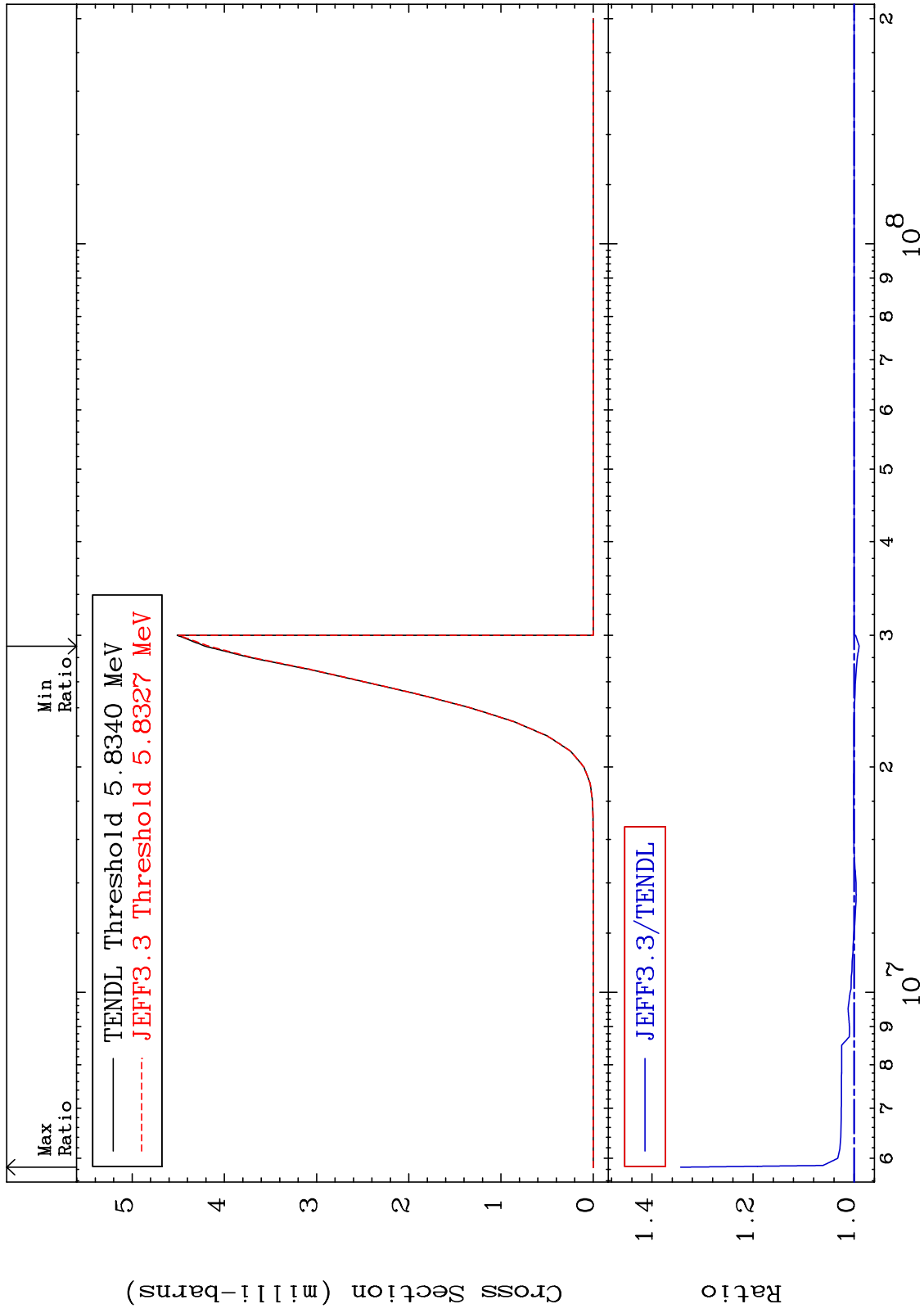
MAT 4228

(n, He-3)

42-Mo-93

Cross Section

-0.998 To 34.33 %



52

Incident Energy (eV)

42-Mo-93

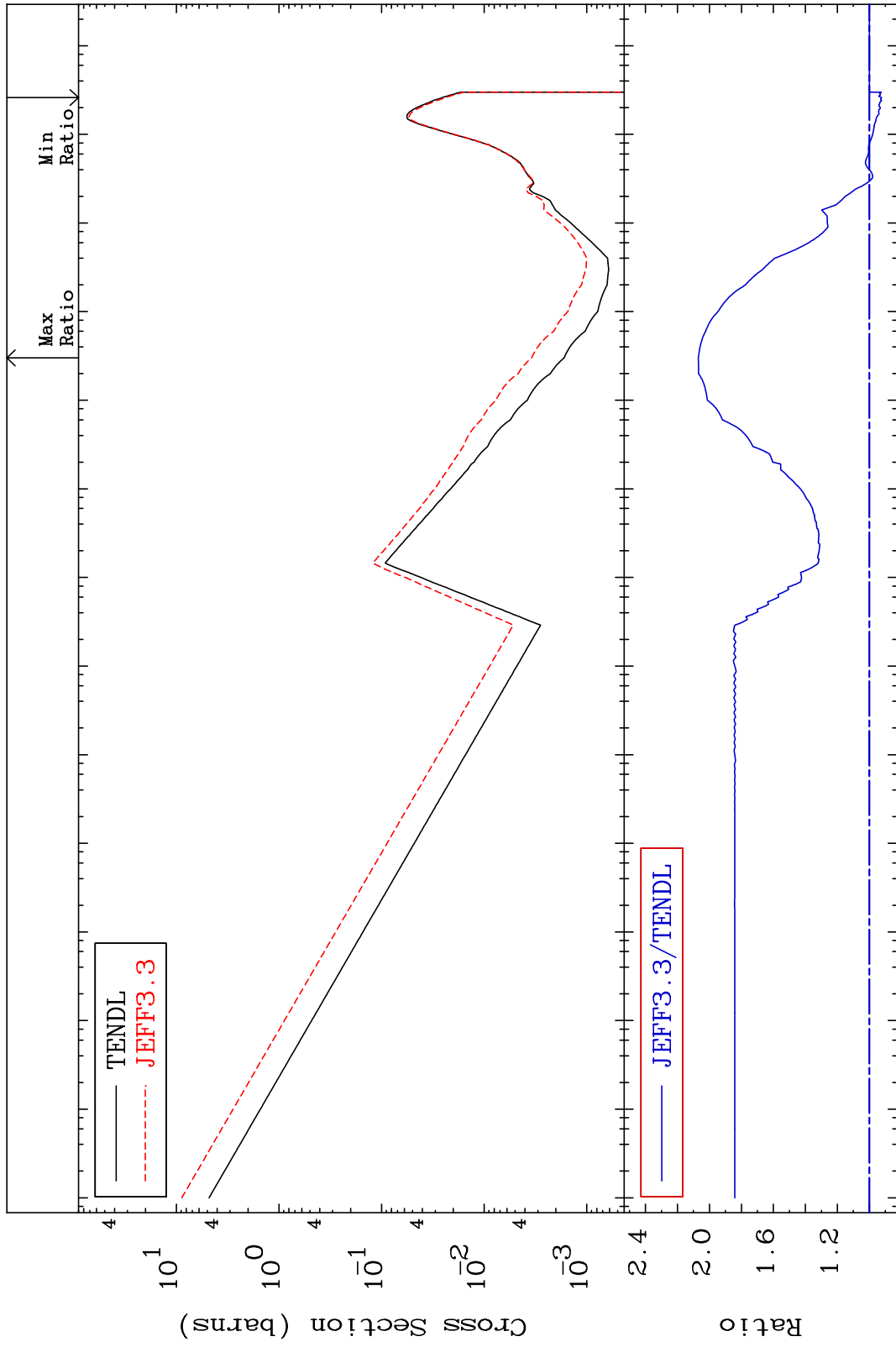
MAT 4228

(n, α)

42-Mo-93

Cross Section

-7.612 To 106.9 %



53

Incident Energy (eV)

42-Mo-93

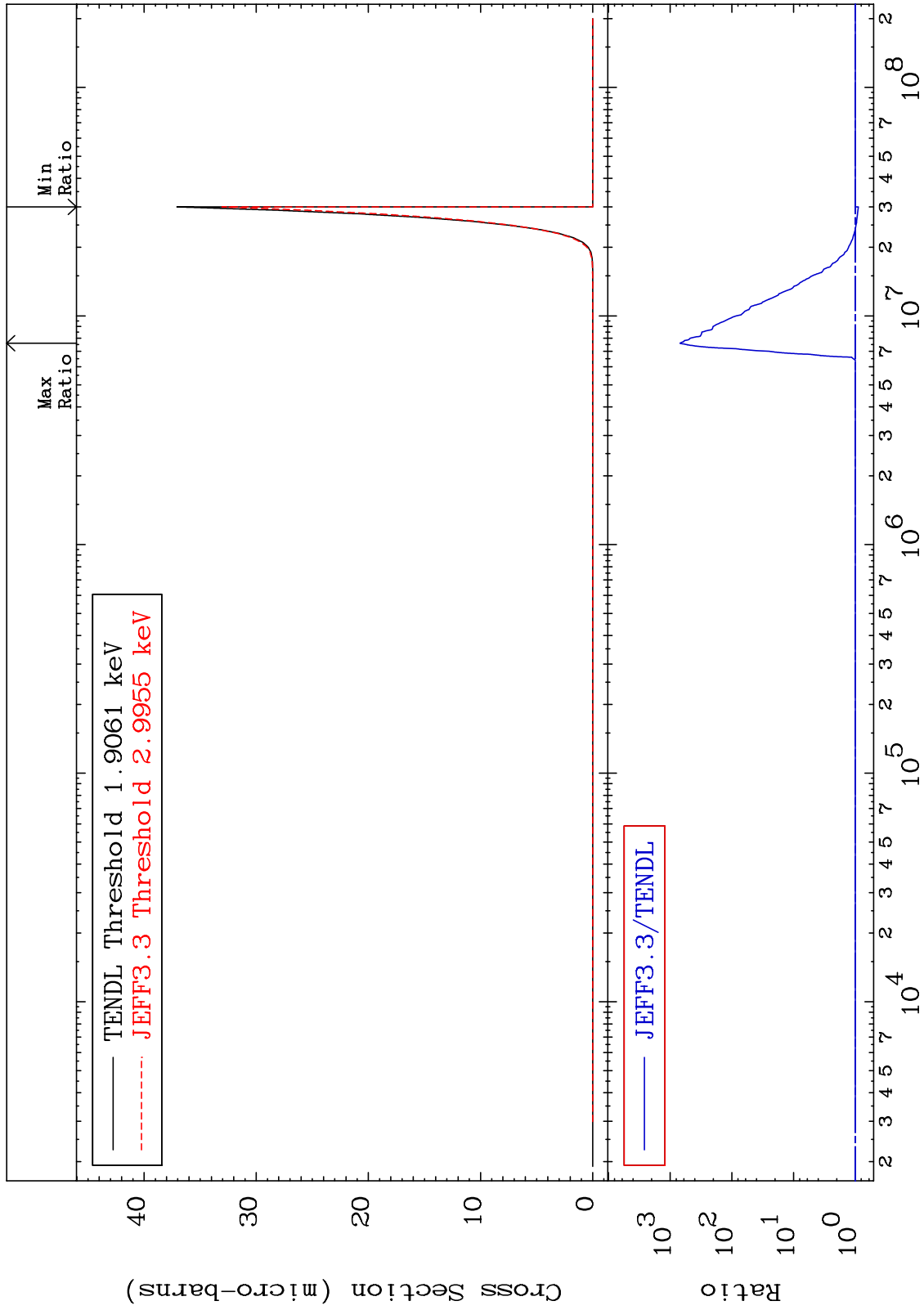
MAT 4228

(n, 2α)

42-Mo-93

Cross Section

-10.88 To 9999. %



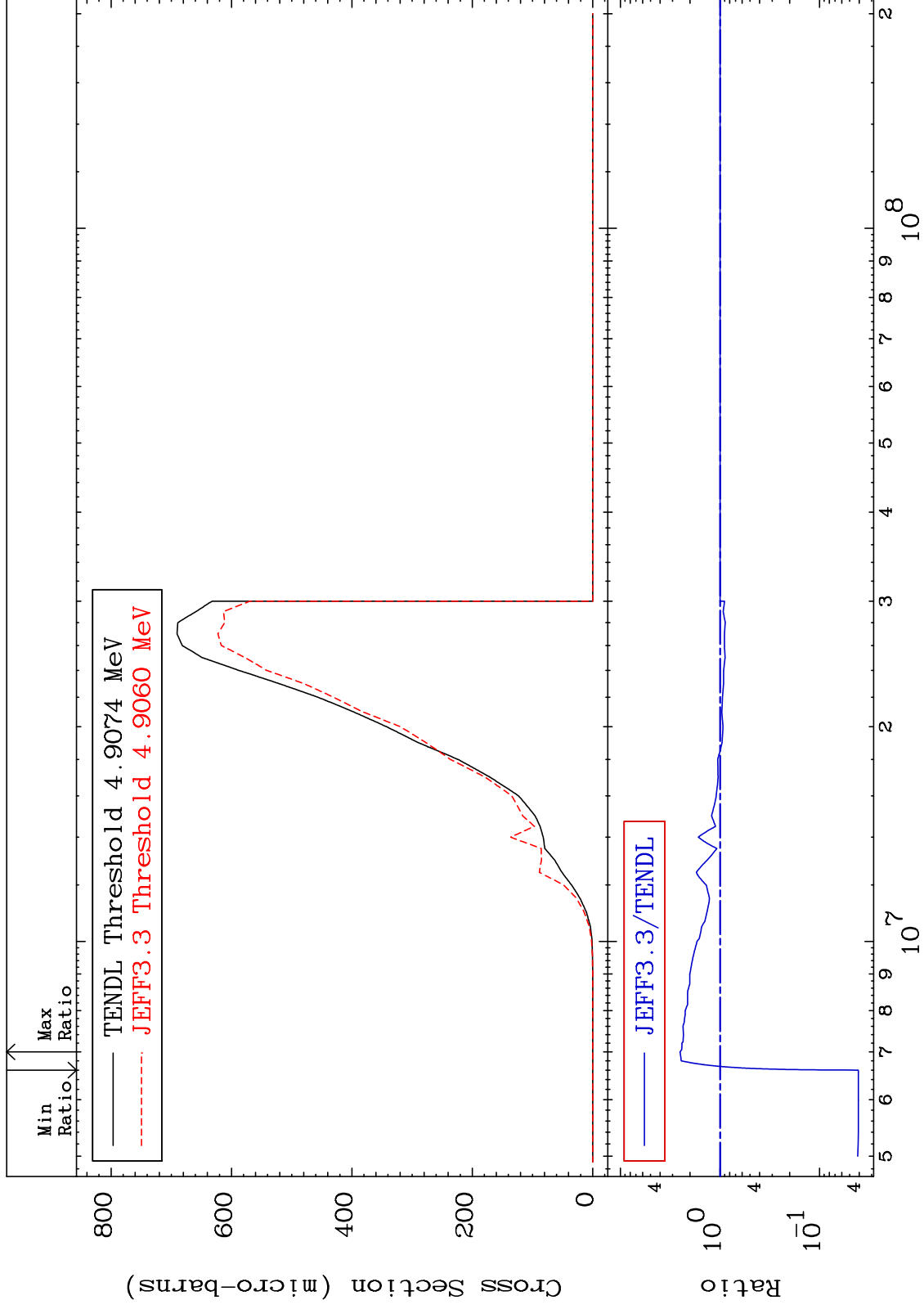
MAT 4228

(n,2p)

42-Mo-93

Cross Section

-95.92 To 152.3 %



55

Incident Energy (eV)

42-Mo-93

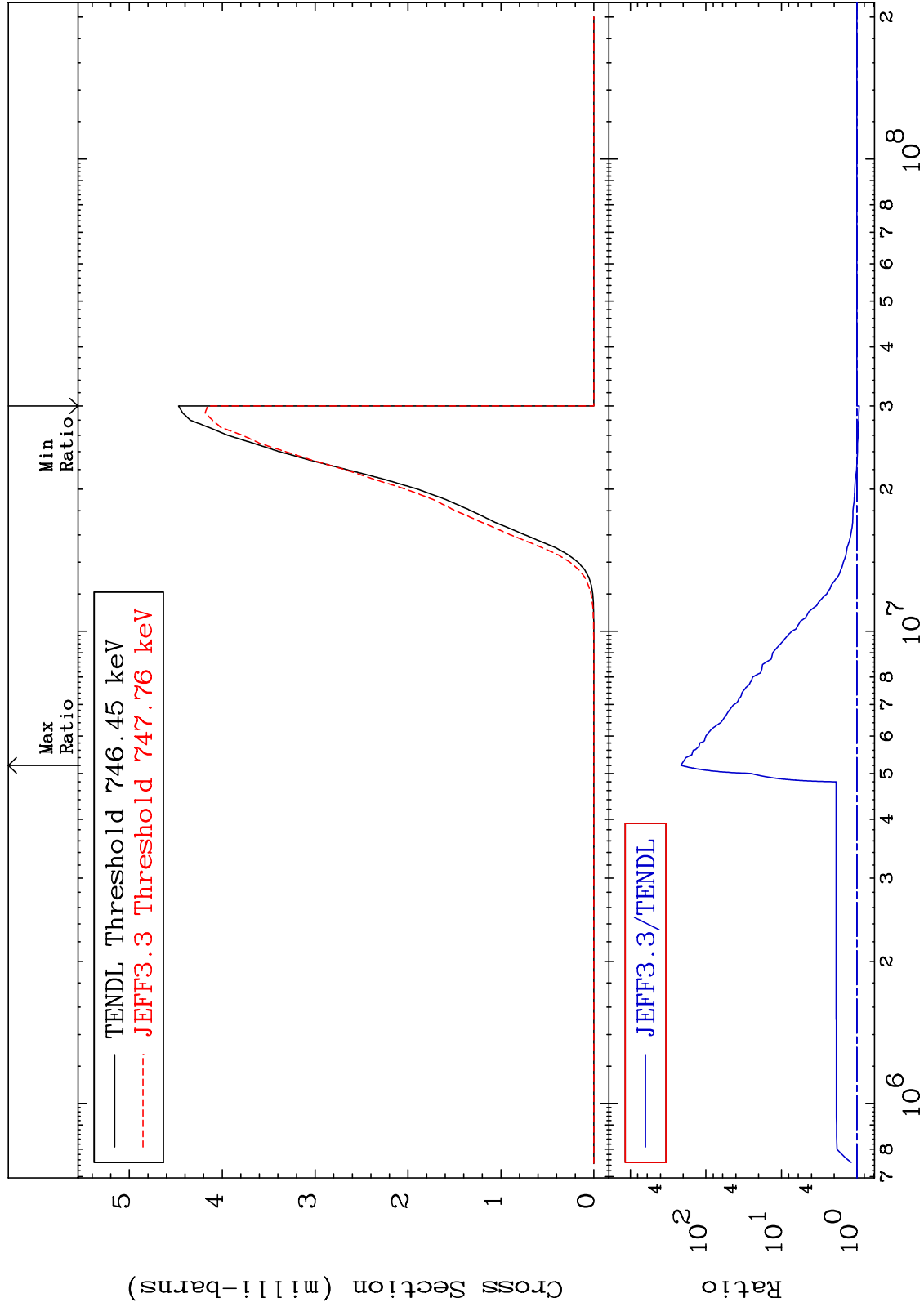
MAT 4228

(n,p) α

42-Mo-93

-7.004 To 9999. %

Cross Section



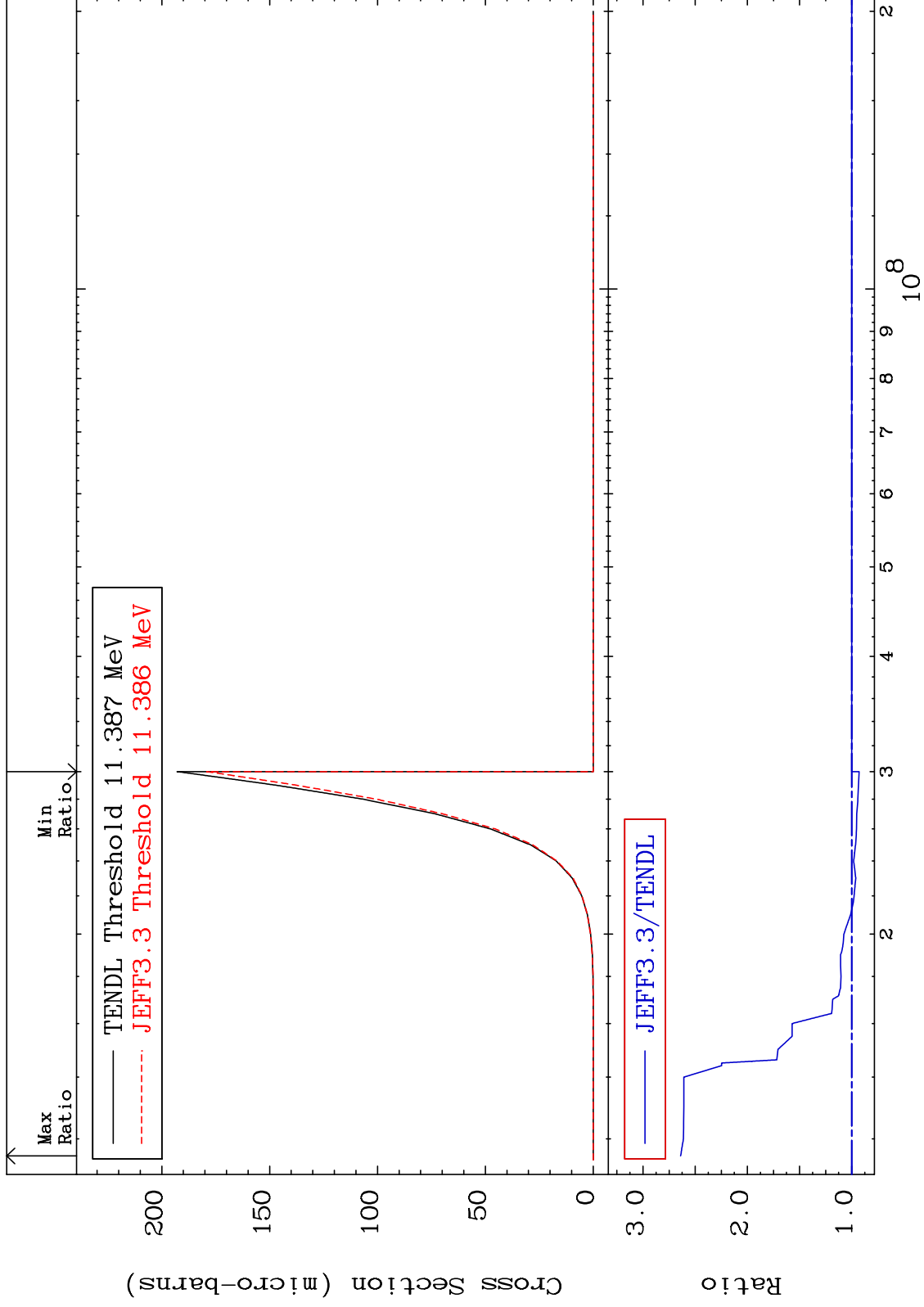
MAT 4228

(n,p) d

42-Mo-93

Cross Section

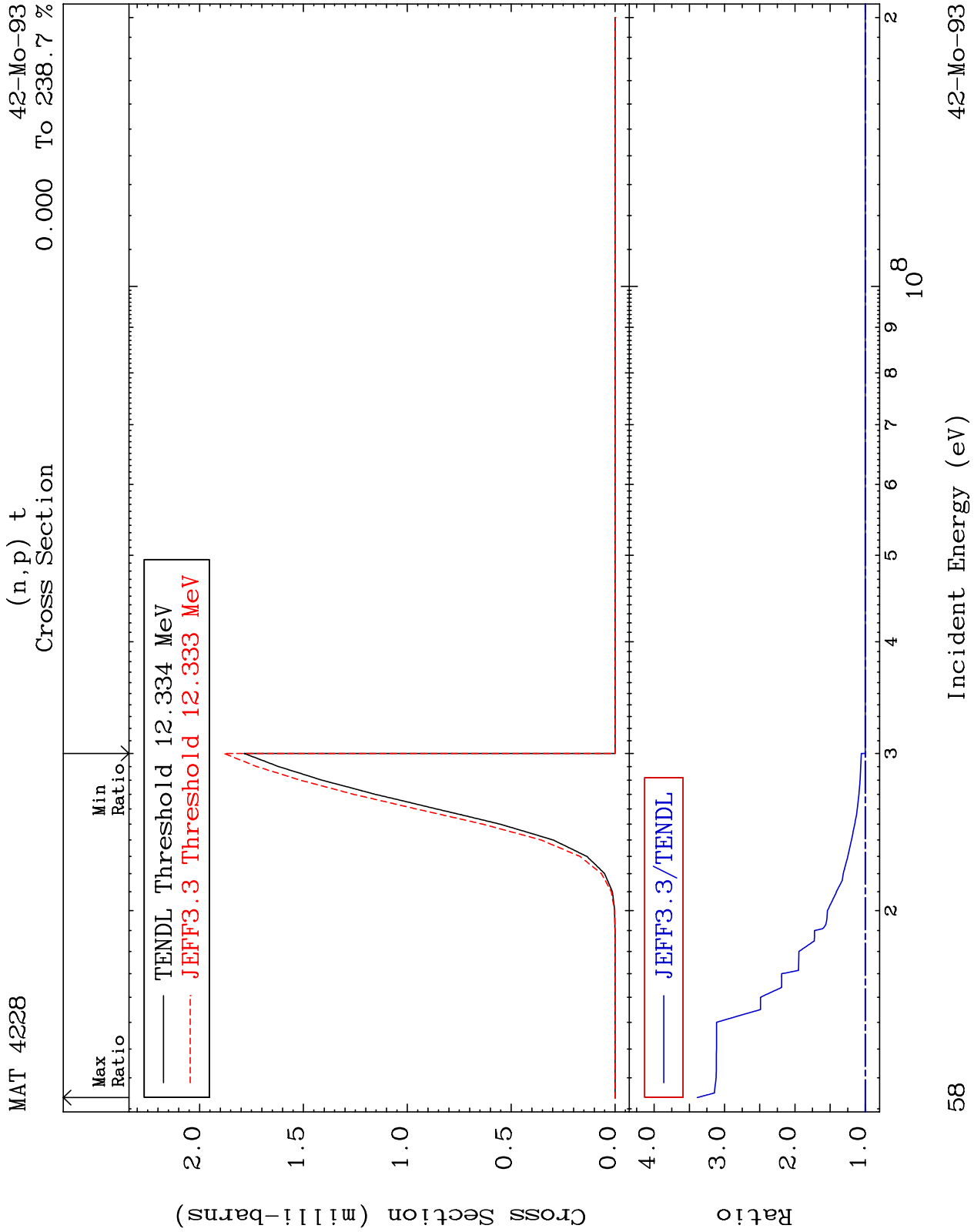
-7.110 To 164.0 %



57

Incident Energy (eV)

42-Mo-93



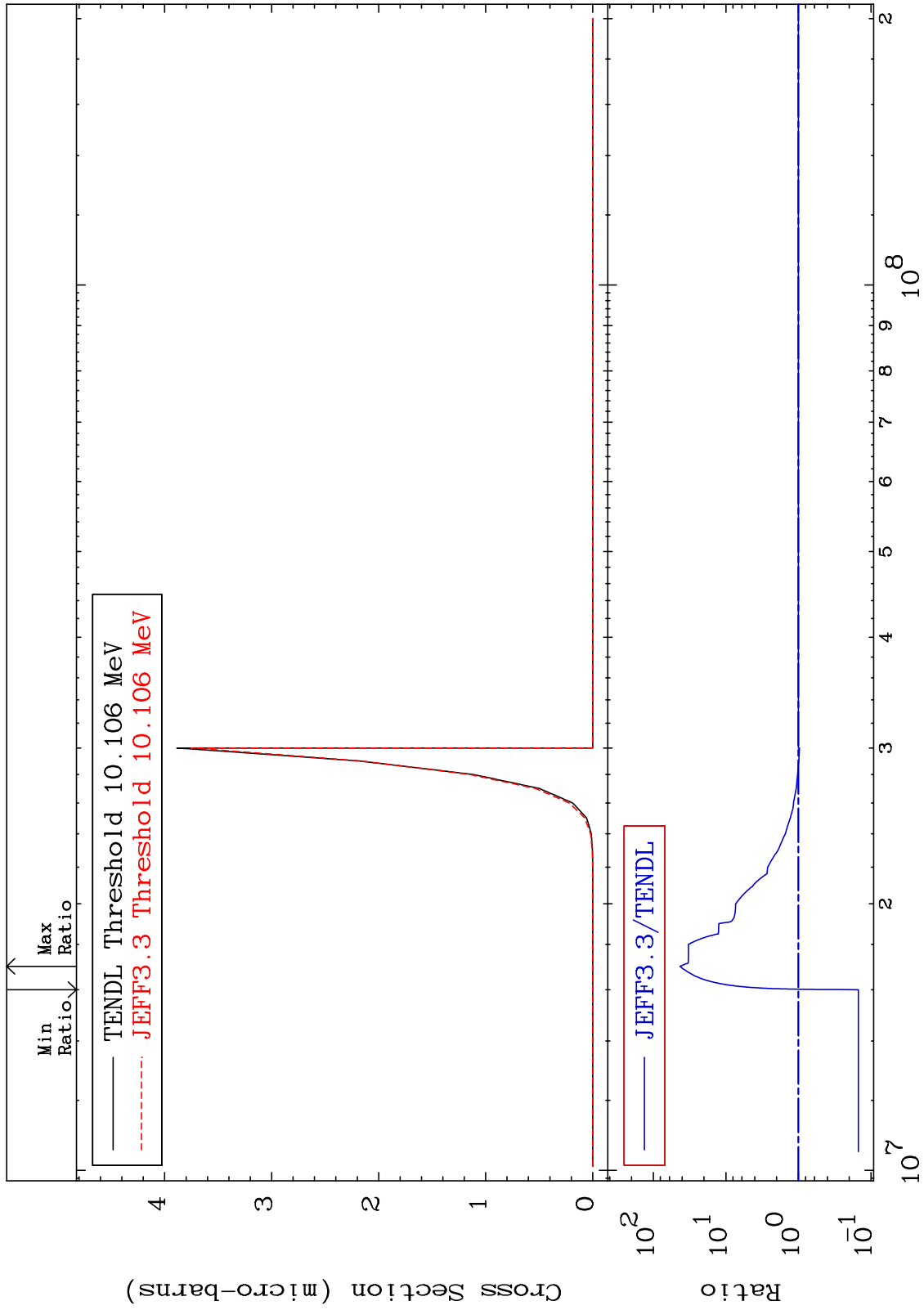
MAT 4228

(n,d) α

42-Mo-93

Cross Section

-85.08 To 4187. %



59

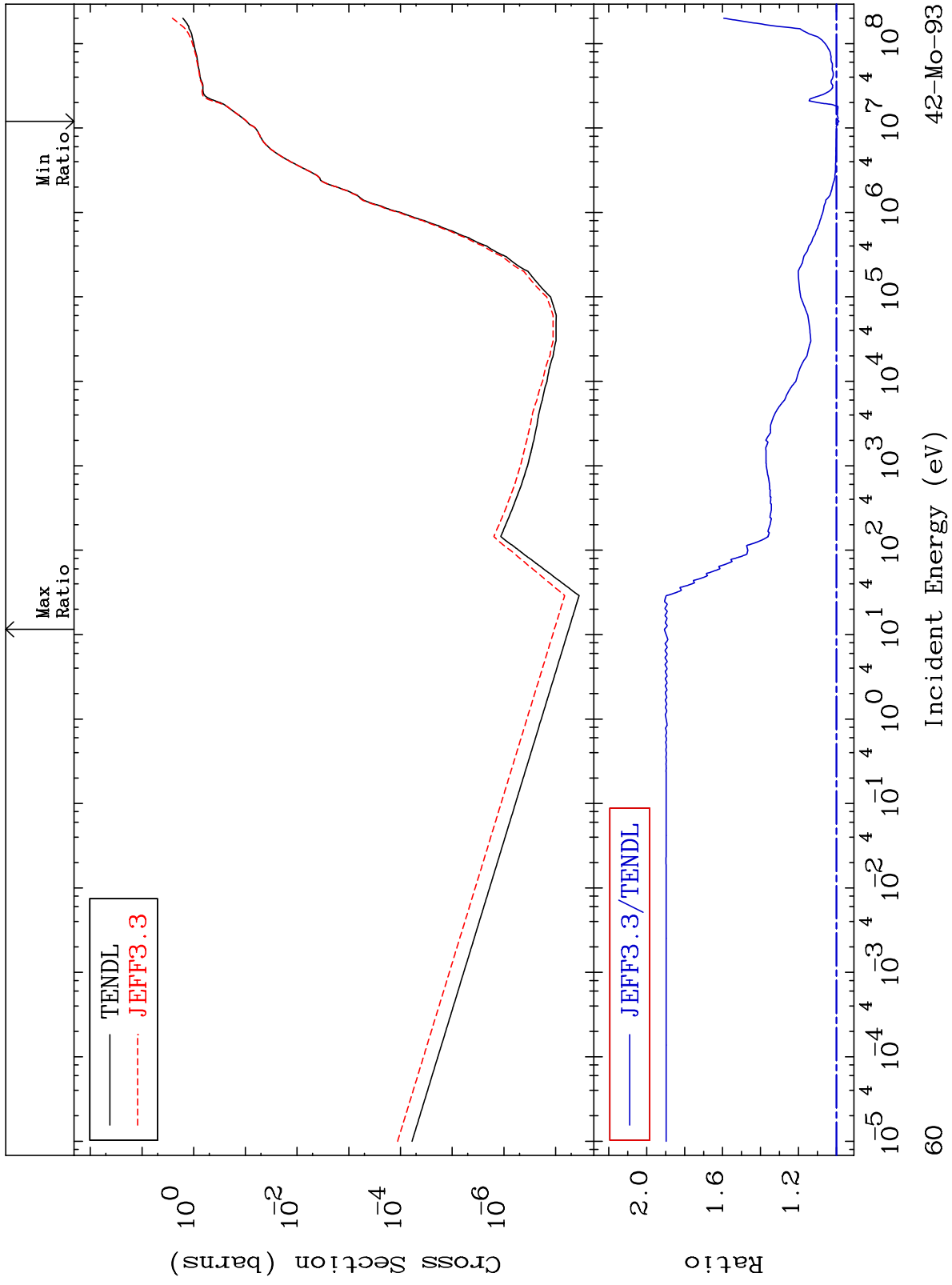
Incident Energy (eV)

42-Mo-93

MAT 4228

Hydrogen Production
Cross Section

42-Mo-93
-1.396 To 90.61 %



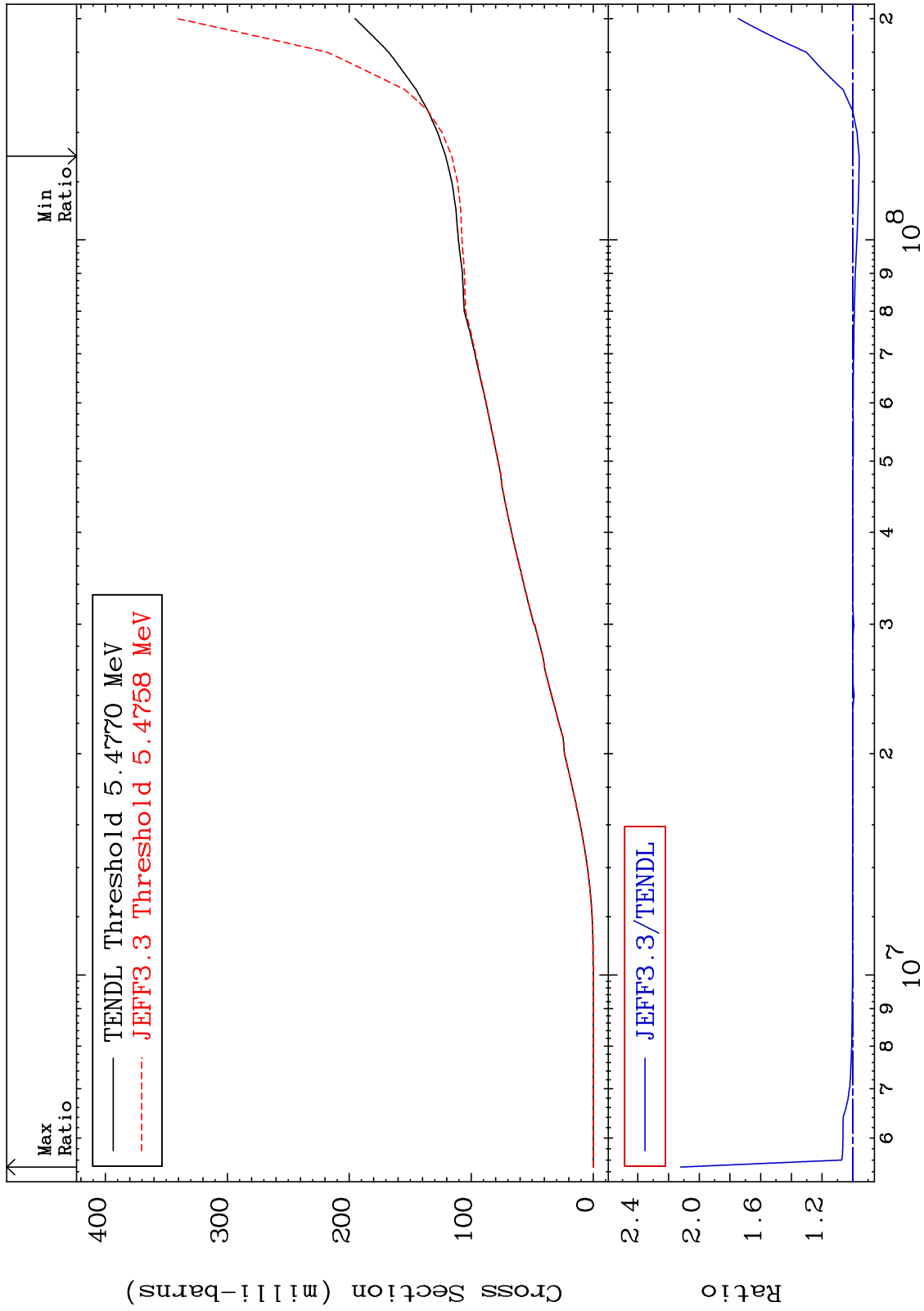
60

42-Mo-93

MAT 4228

Deuterium Production
Cross Section

42-Mo-93
-4.171 To 112.1 %



61

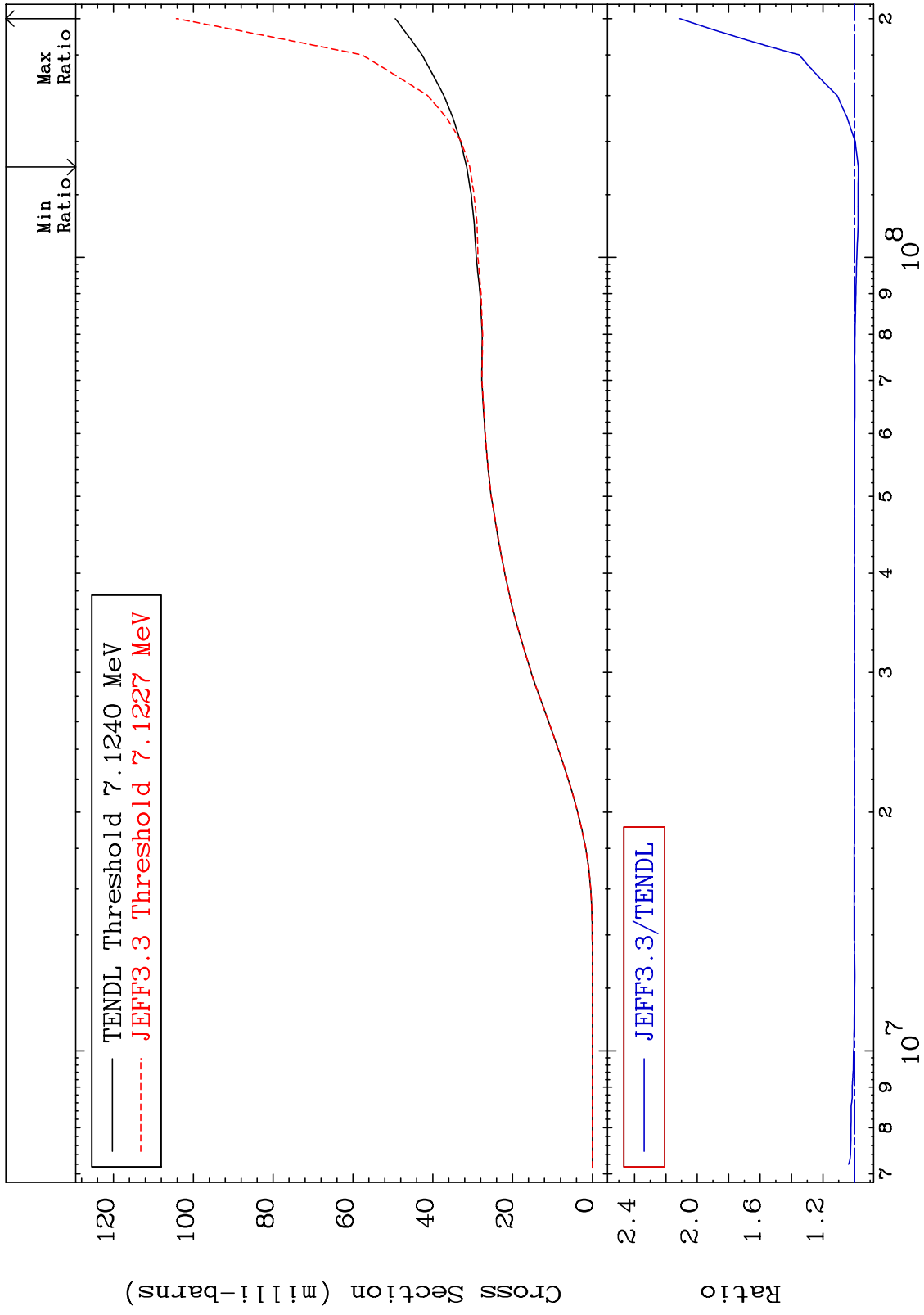
Incident Energy (eV)

42-Mo-93

MAT 4228

Tritium Production
Cross Section

42-Mo-93
-2.519 To 111.1 %



62

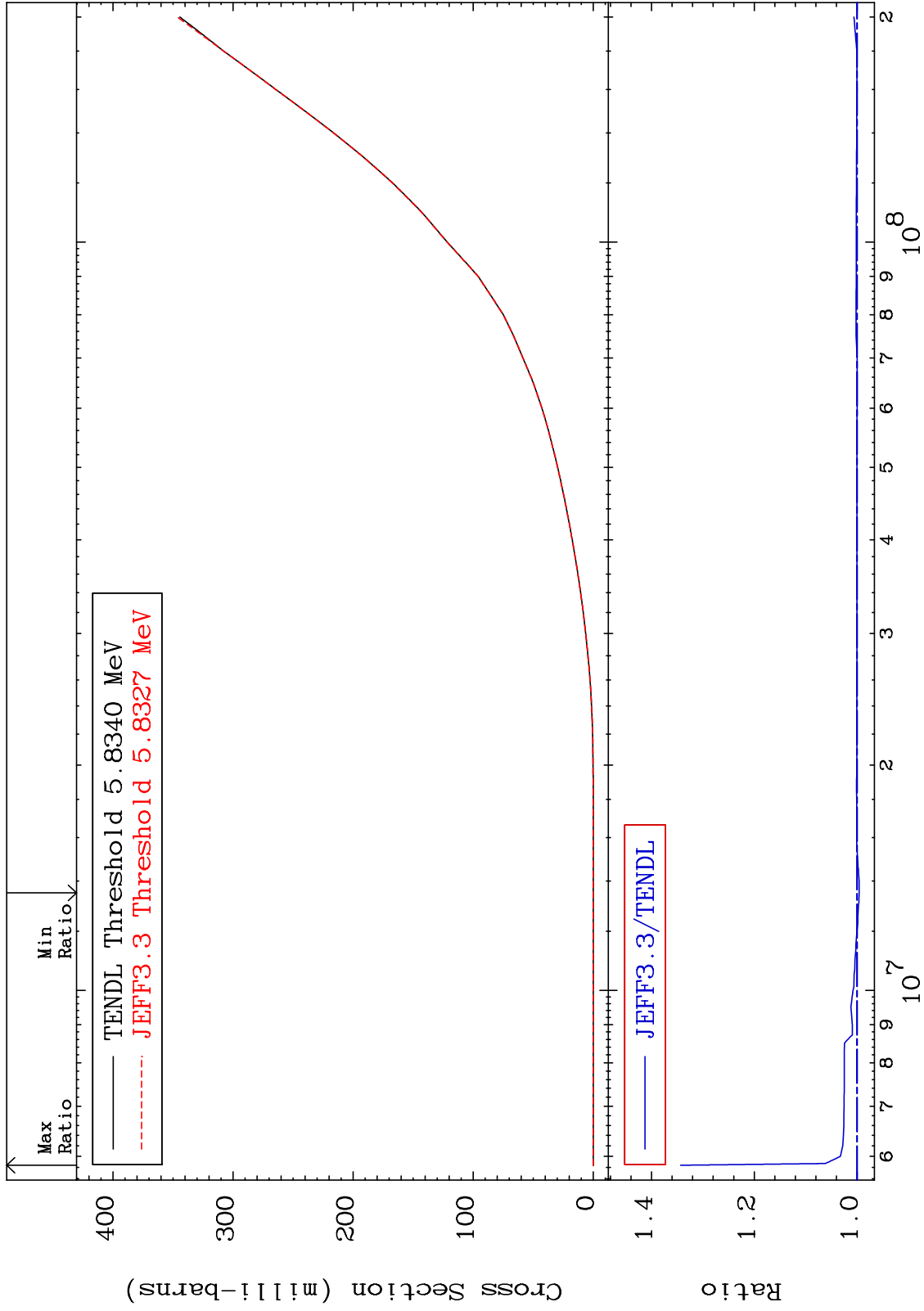
Incident Energy (eV)

42-Mo-93

MAT 4228

He-3 Production
Cross Section

42-Mo-93
-0.407 To 34.33 %



63

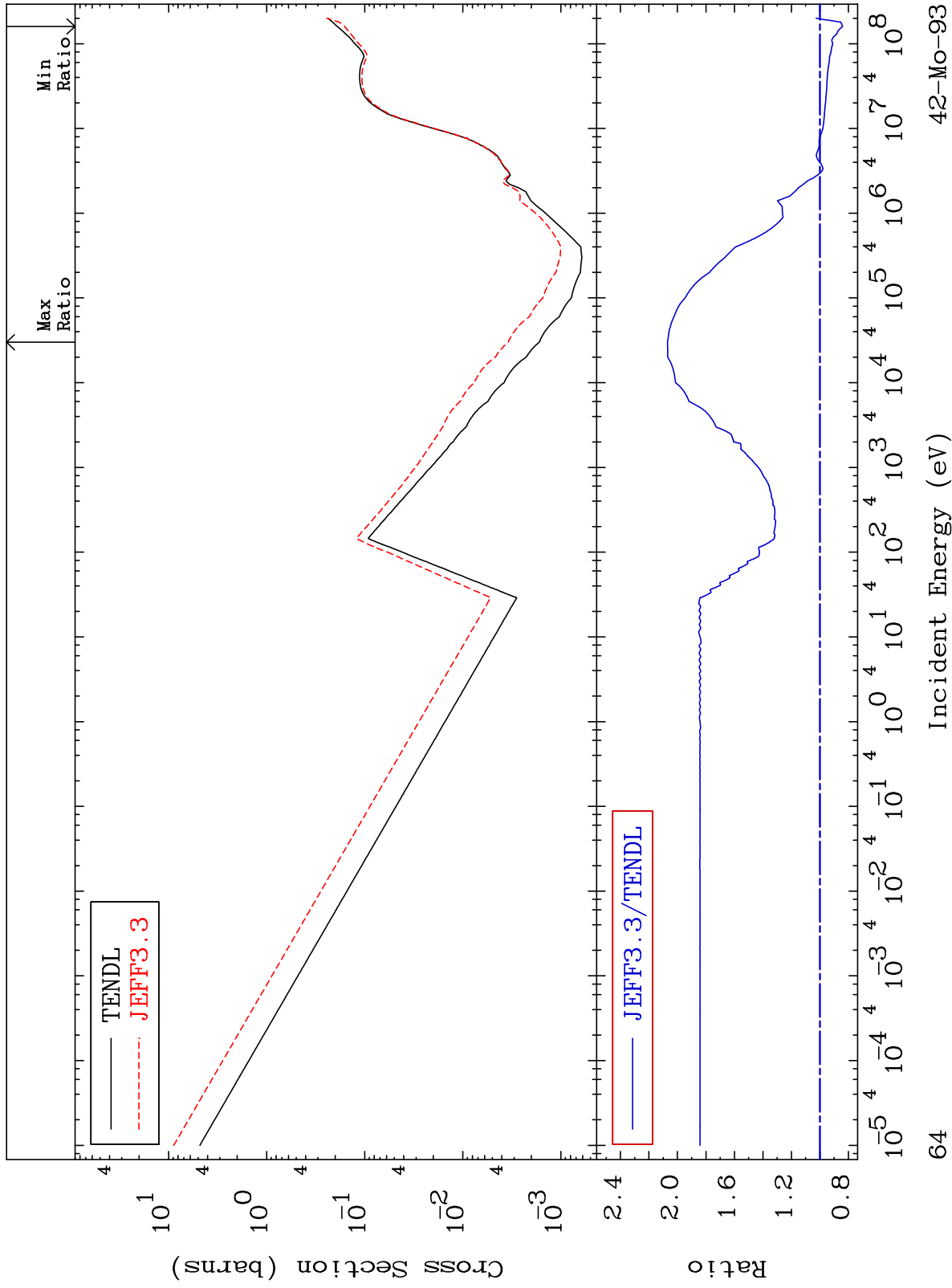
Incident Energy (eV)

42-Mo-93

MAT 4228

He-4 Production
Cross Section

42-Mo-93
-16.00 To 106.9 %



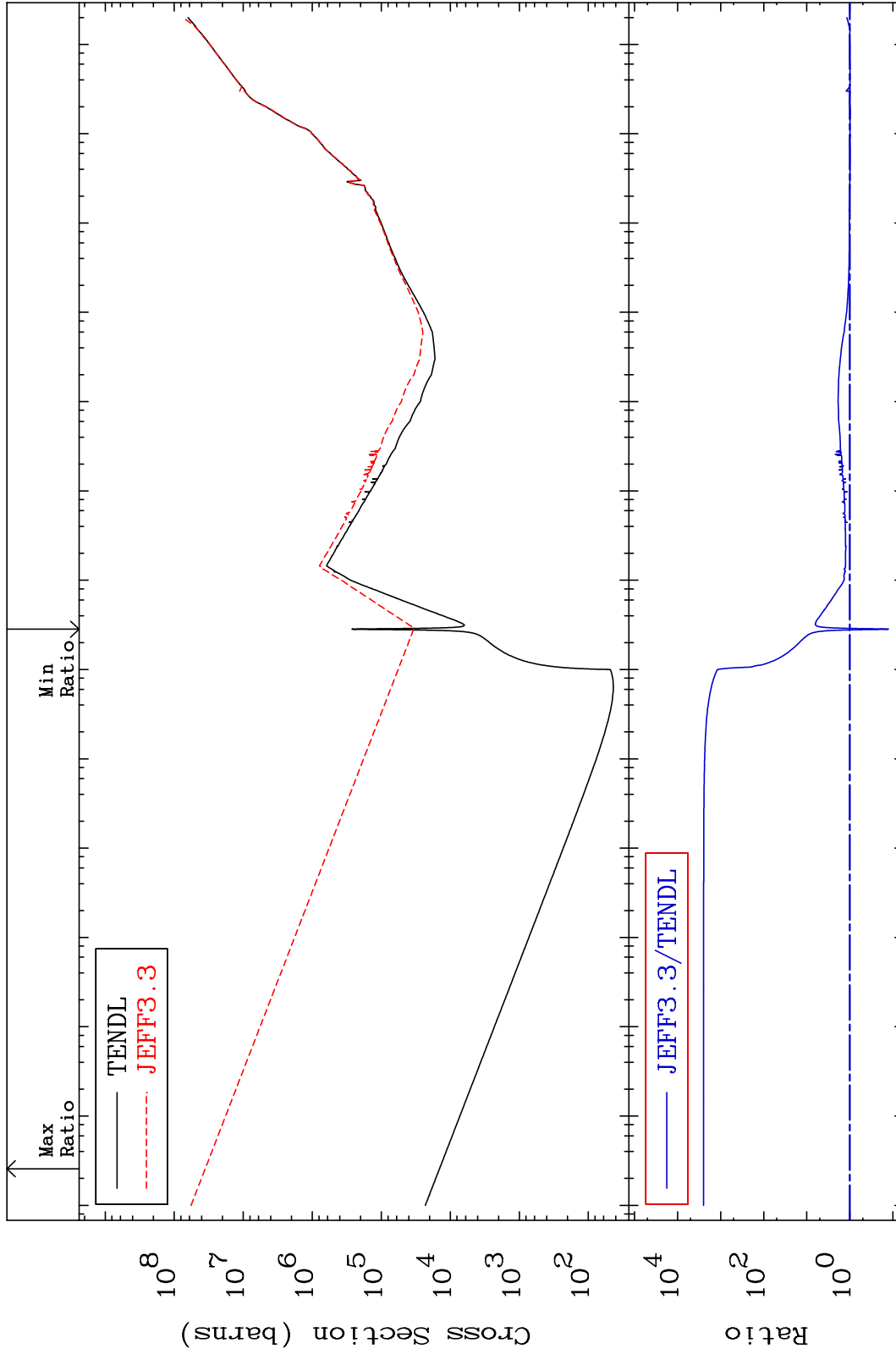
64

42-Mo-93

MAT 4228

Kerma total (eV-barns)
Cross Section

42-Mo-93
-87.13 To 9999. %

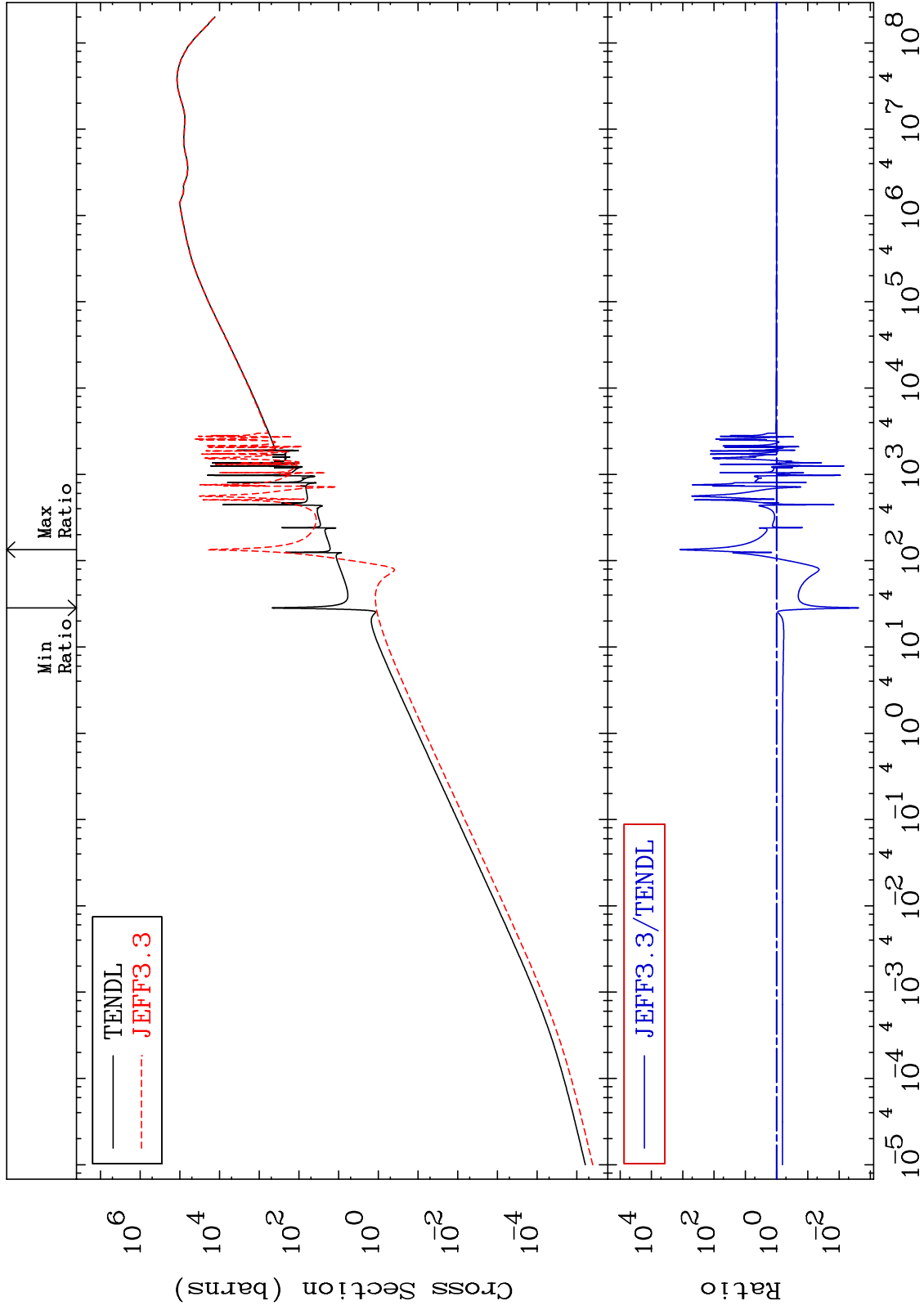


65
Incident Energy (eV)
42-Mo-93

MAT 4228

Kerma elastic
Cross Section

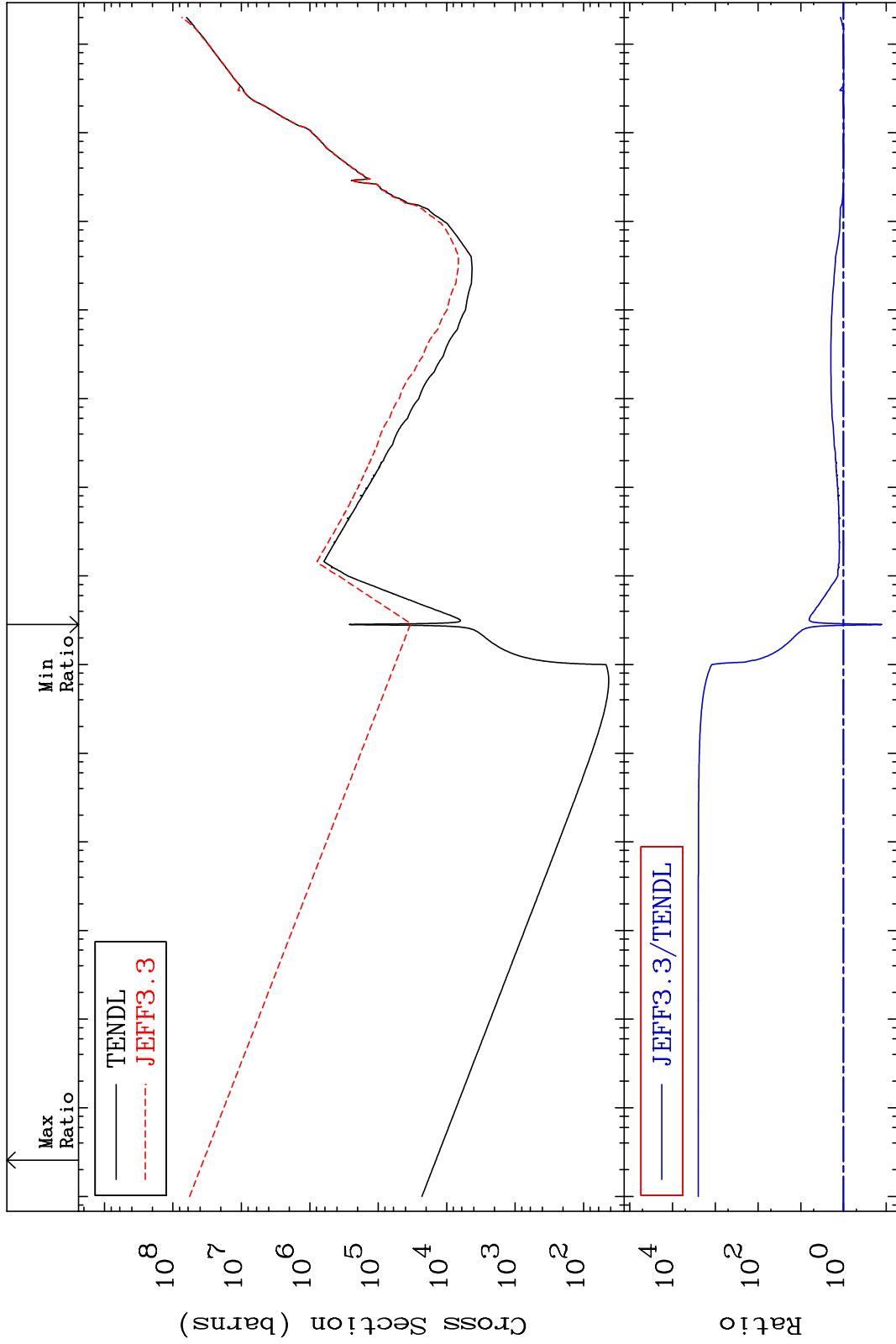
42-Mo-93
-99.76 To 9999. %



MAT 4228

Kerma non-elastic (all but mt2)
Cross Section

42-Mo-93
-87.10 To 9999. %



67

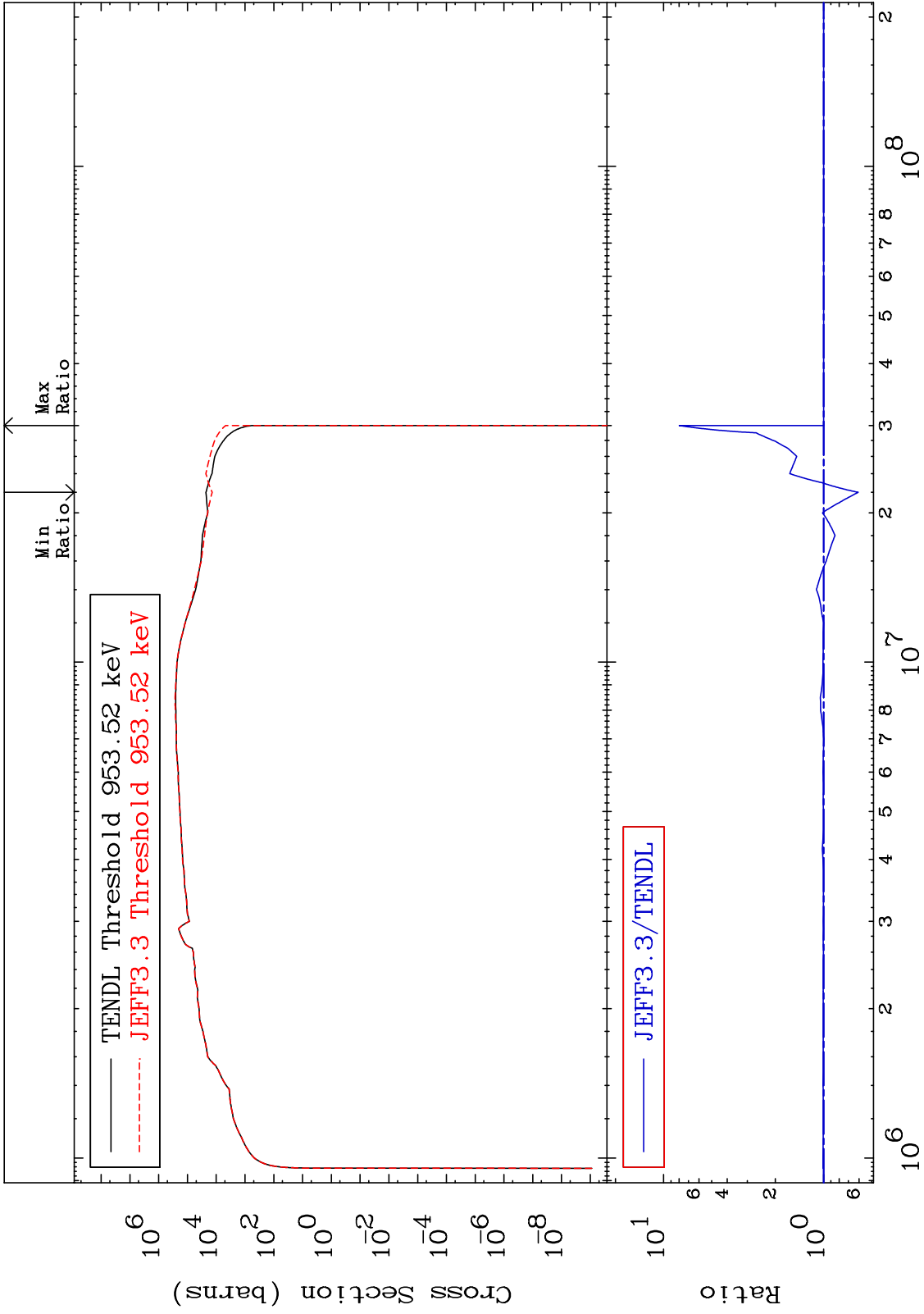
Incident Energy (eV)

42-Mo-93

MAT 4228

Kerma inelastic (mt51-91)
Cross Section

42-Mo-93
-39.30 To 697.0 %



68

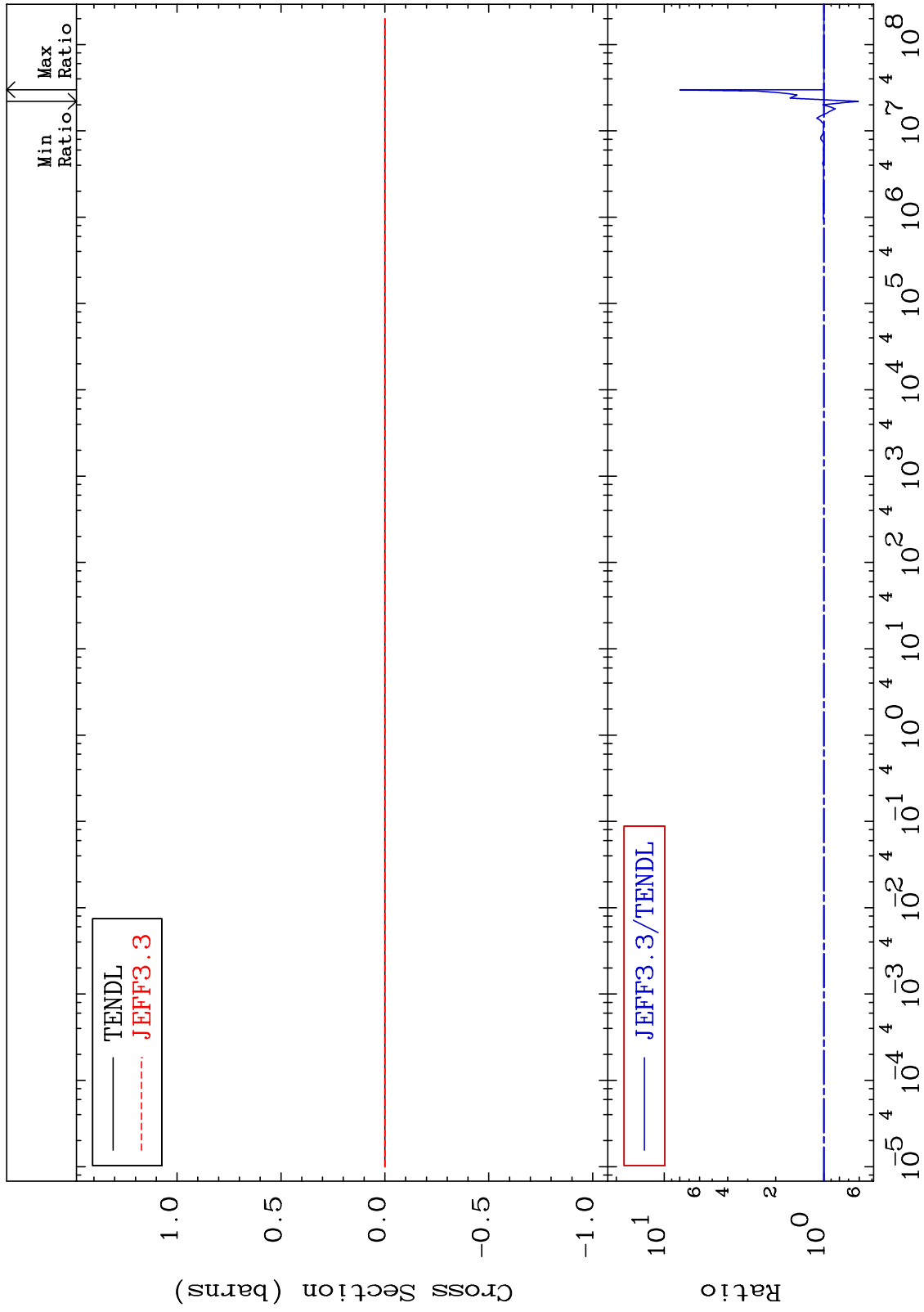
Incident Energy (eV)

42-Mo-93

MAT 4228

Kerma fission (mt18 or mt19-20-21-38)
Cross Section

42-Mo-93
-39.30 To 697.0 %



69

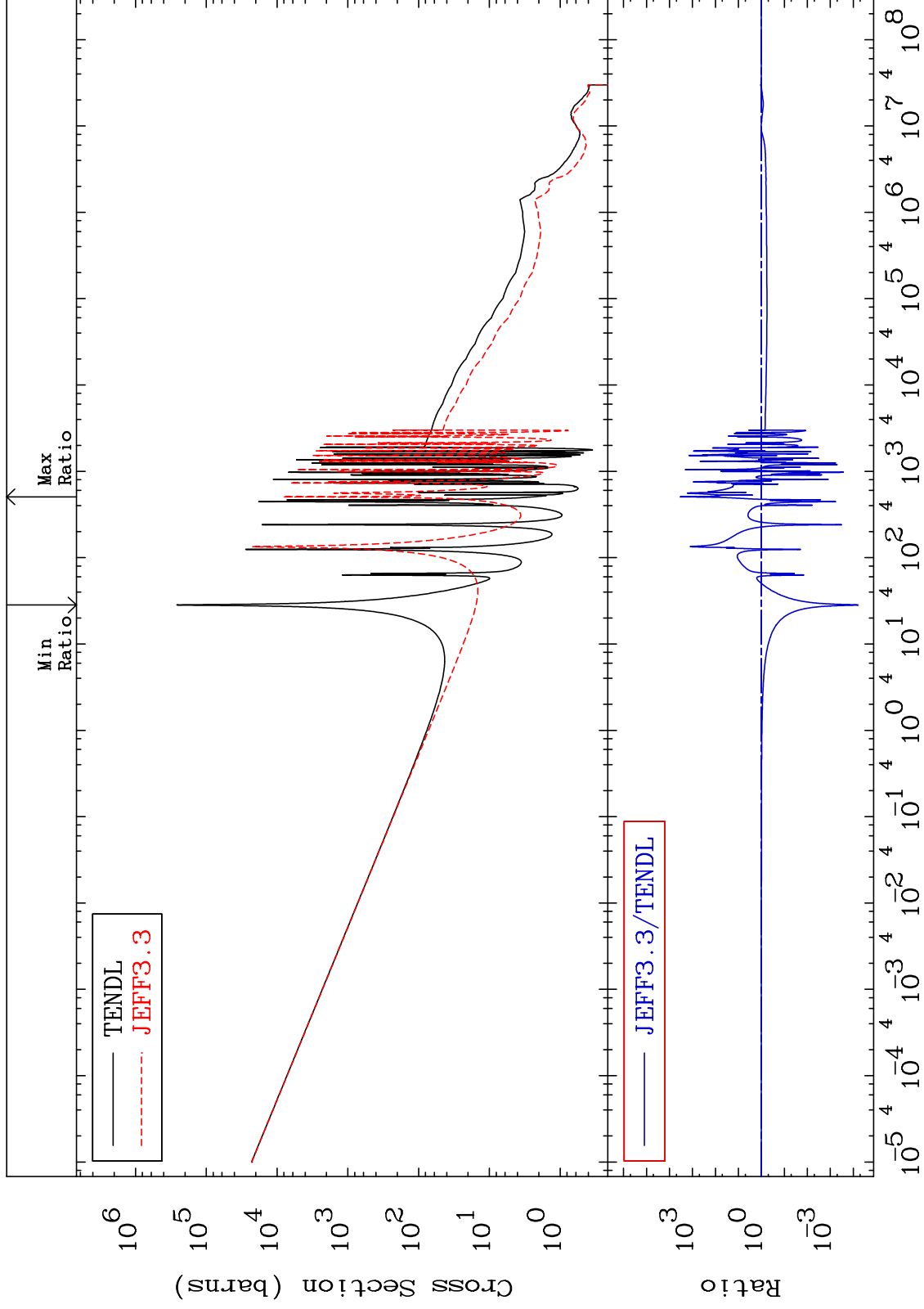
Incident Energy (eV)

42-Mo-93

MAT 4228

Kerma capture (mt102)
Cross Section

42-Mo-93
-99.99 To 9999. %



70

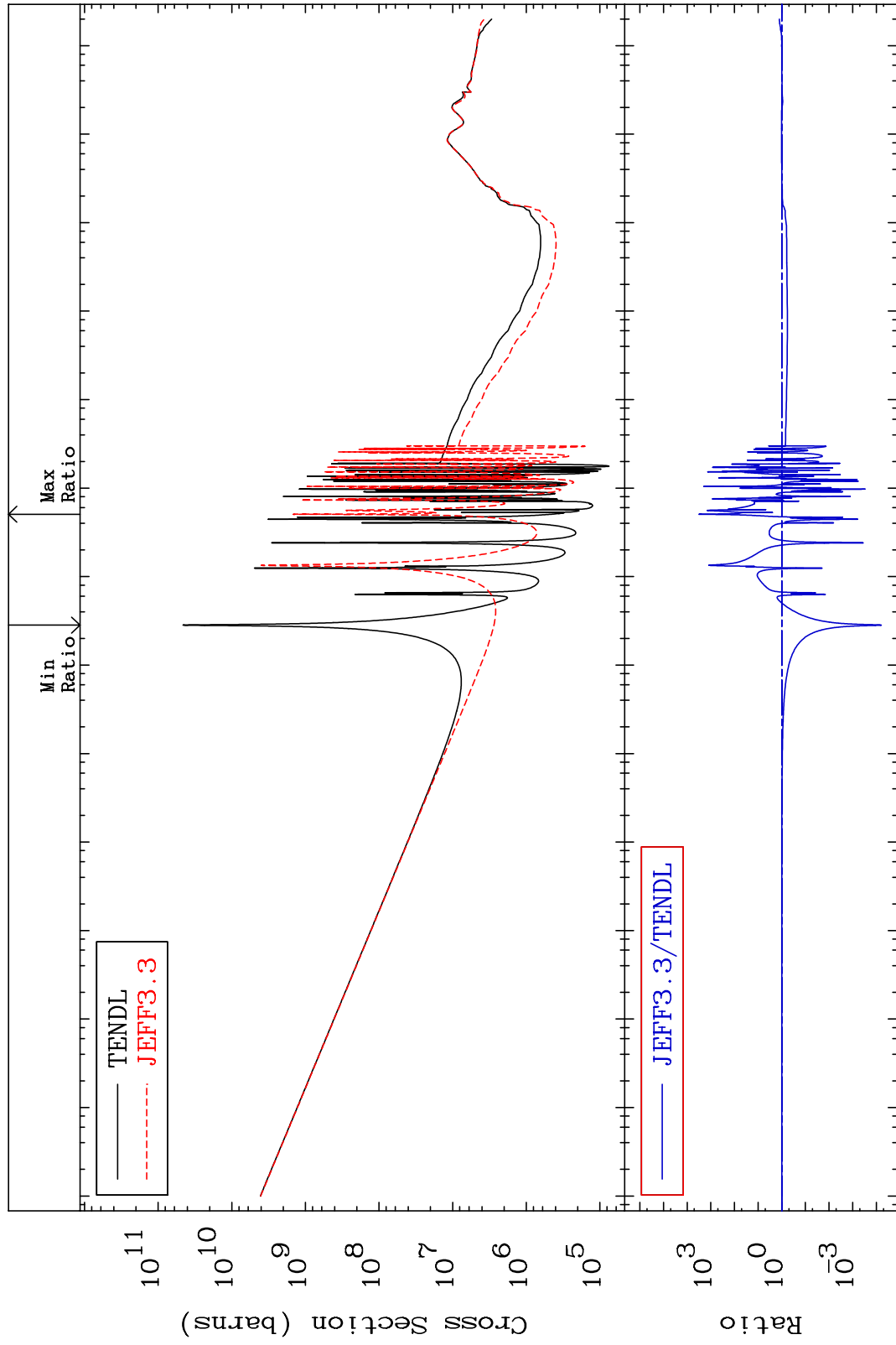
Incident Energy (eV)

42-Mo-93

MAT 4228

Total photon (eV-barns)
Cross Section

42-Mo-93
-99.99 To 9999. %



71

Incident Energy (eV)

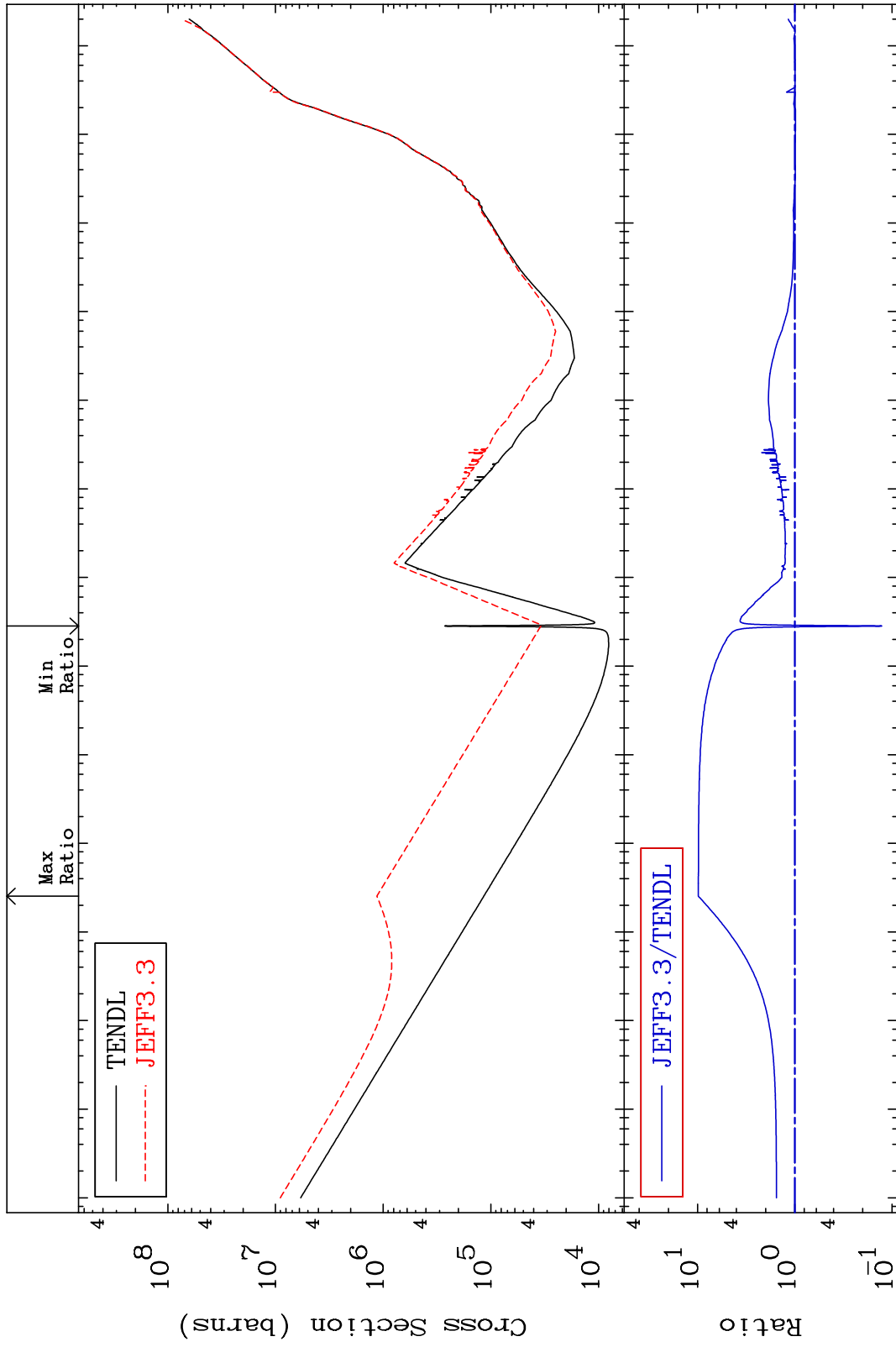
42-Mo-93

MAT 4228

Total kinematic kerma (high limit)
Cross Section

42-Mo-93

-87.19 To 885.0 %



72

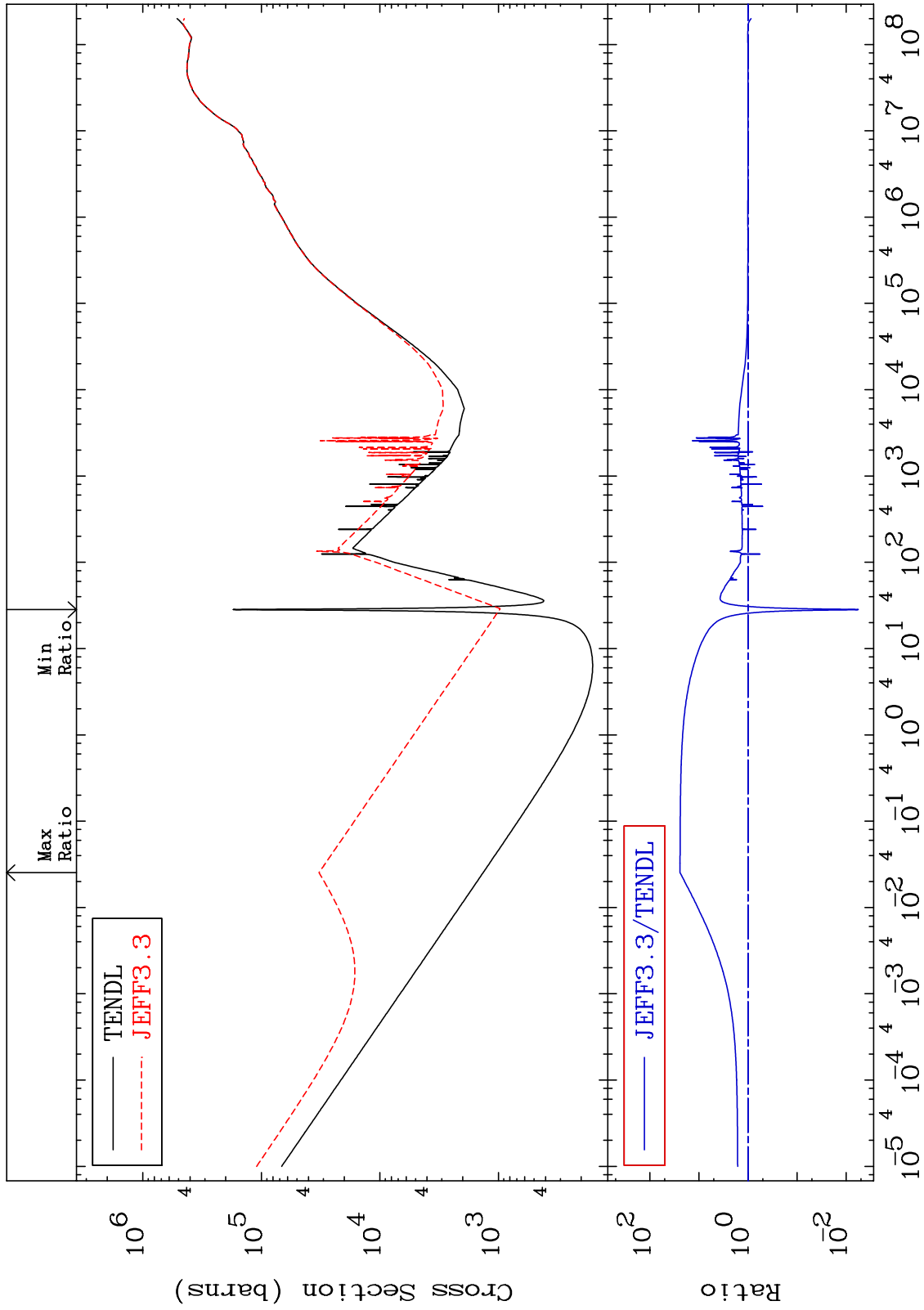
Incident Energy (eV)

42-Mo-93

MAT 4228

Dpa total (eV-barns)
Cross Section

42-Mo-93
-99.44 To 2326. %



73

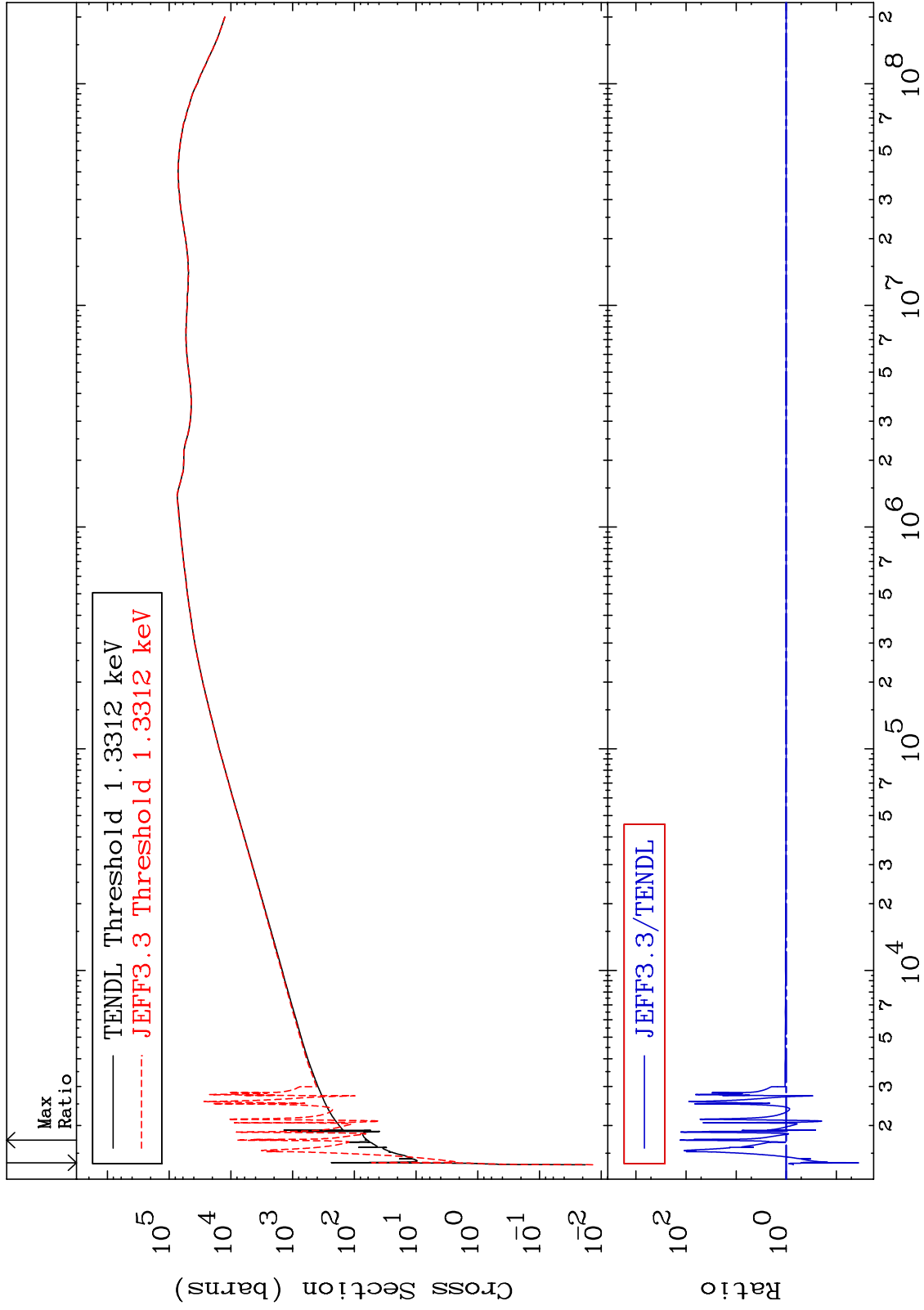
Incident Energy (eV)

42-Mo-93

MAT 4228

Dpa elastic (mt2)
Cross Section

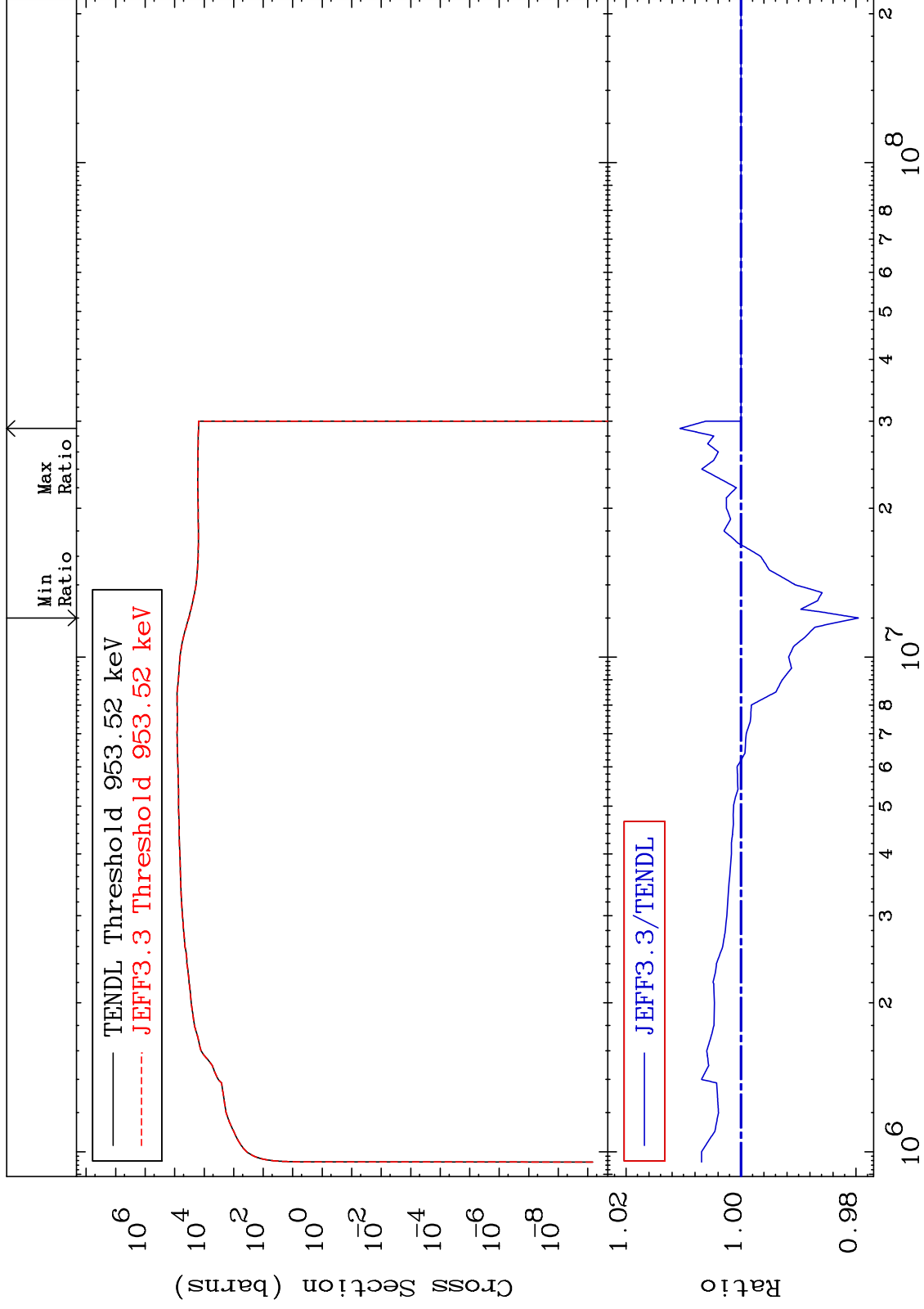
42-Mo-93
-96.38 To 9999. %



MAT 4228

Dpa inelastic (mt51-91)
Cross Section

42-Mo-93
-2.041 To 1.061 %



75

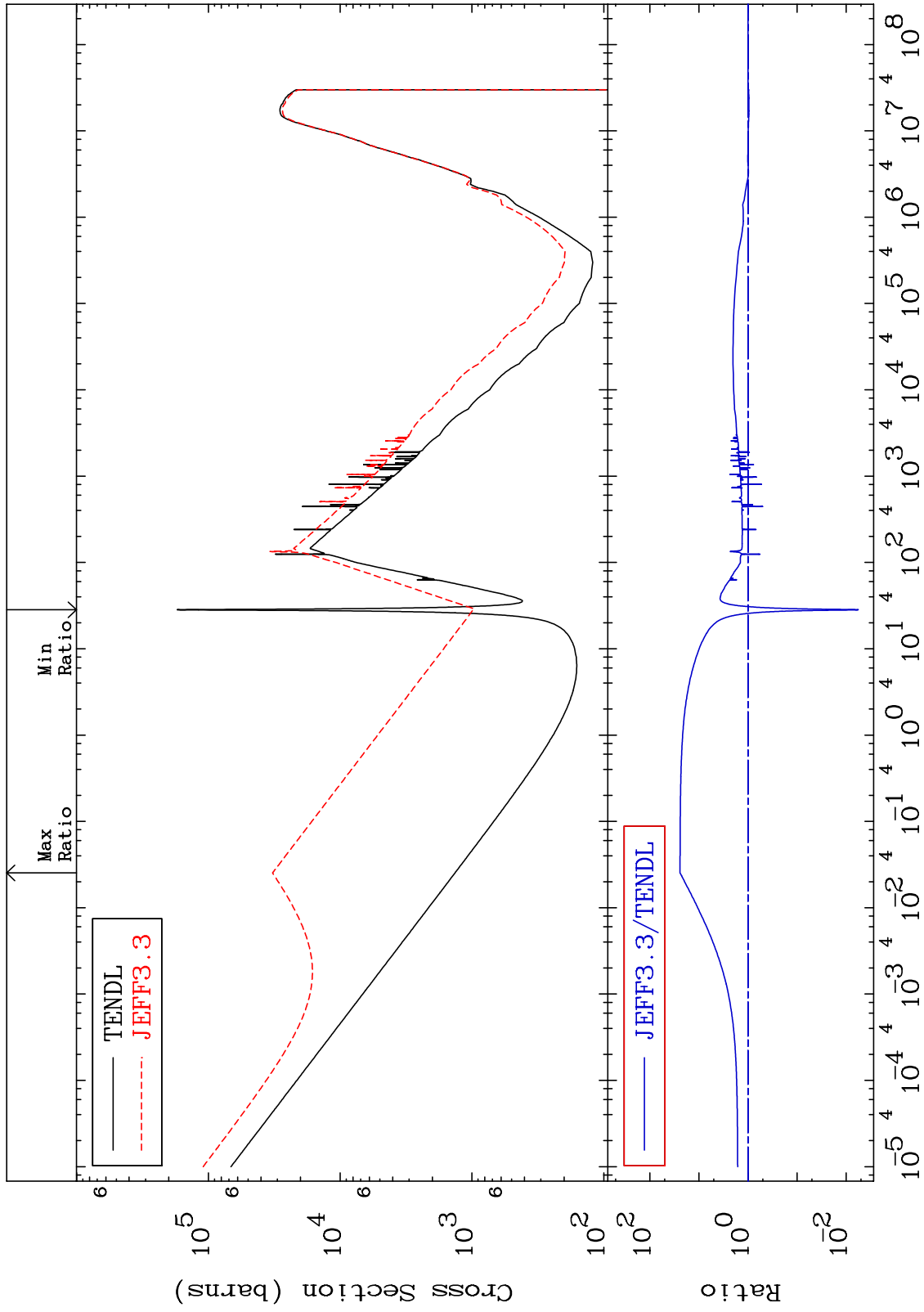
Incident Energy (eV)

42-Mo-93

MAT 4228

Dpa disappearance (mt102 -120)
Cross Section

42-Mo-93
-99.44 To 2326. %



76

Incident Energy (eV)

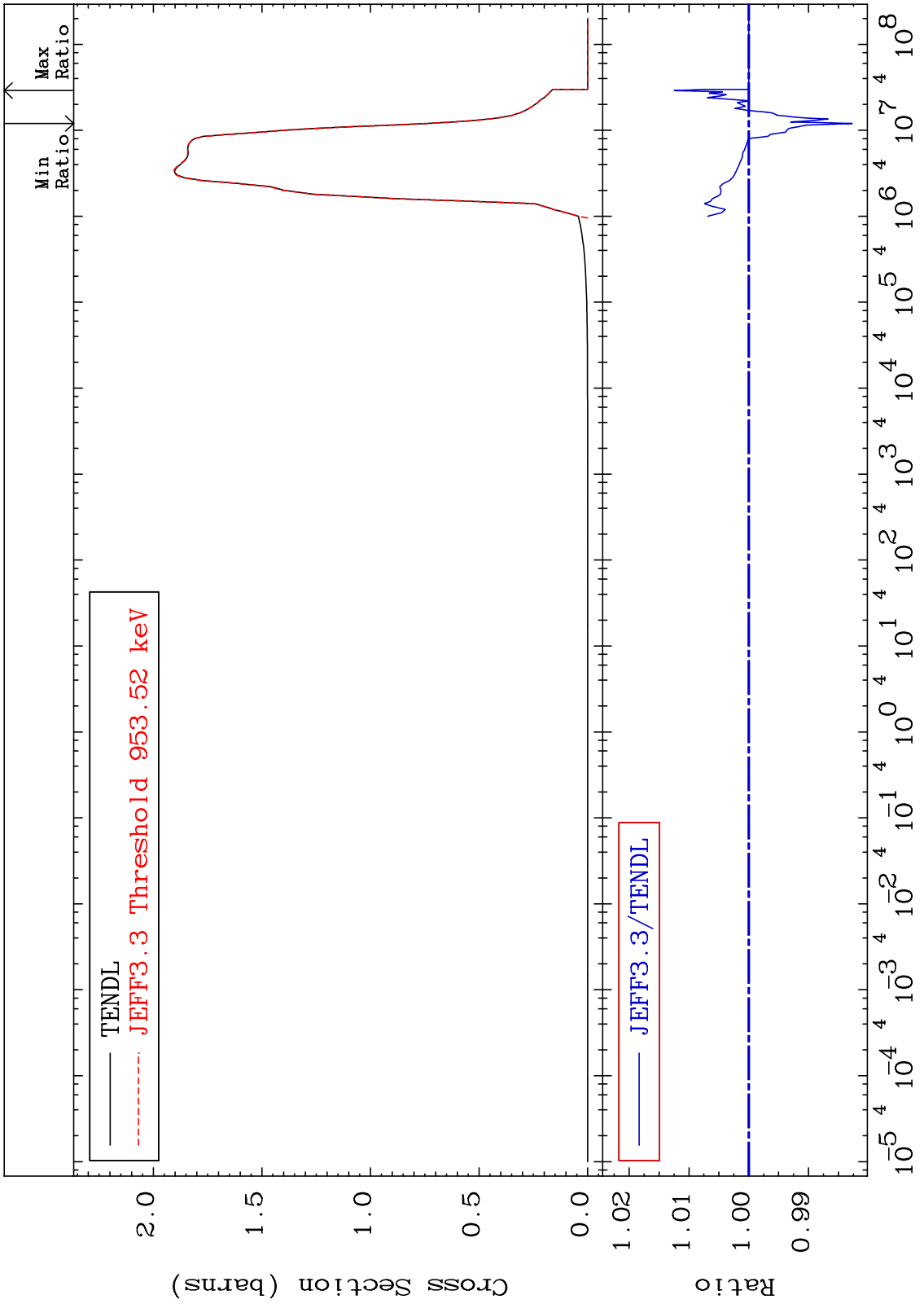
42-Mo-93

MAT 4228

42-Mo-93

Inelastic: 42-Mo-93g

Radionuclide Production Cross Section -1.731 To 1.241 %



77

Incident Energy (eV)

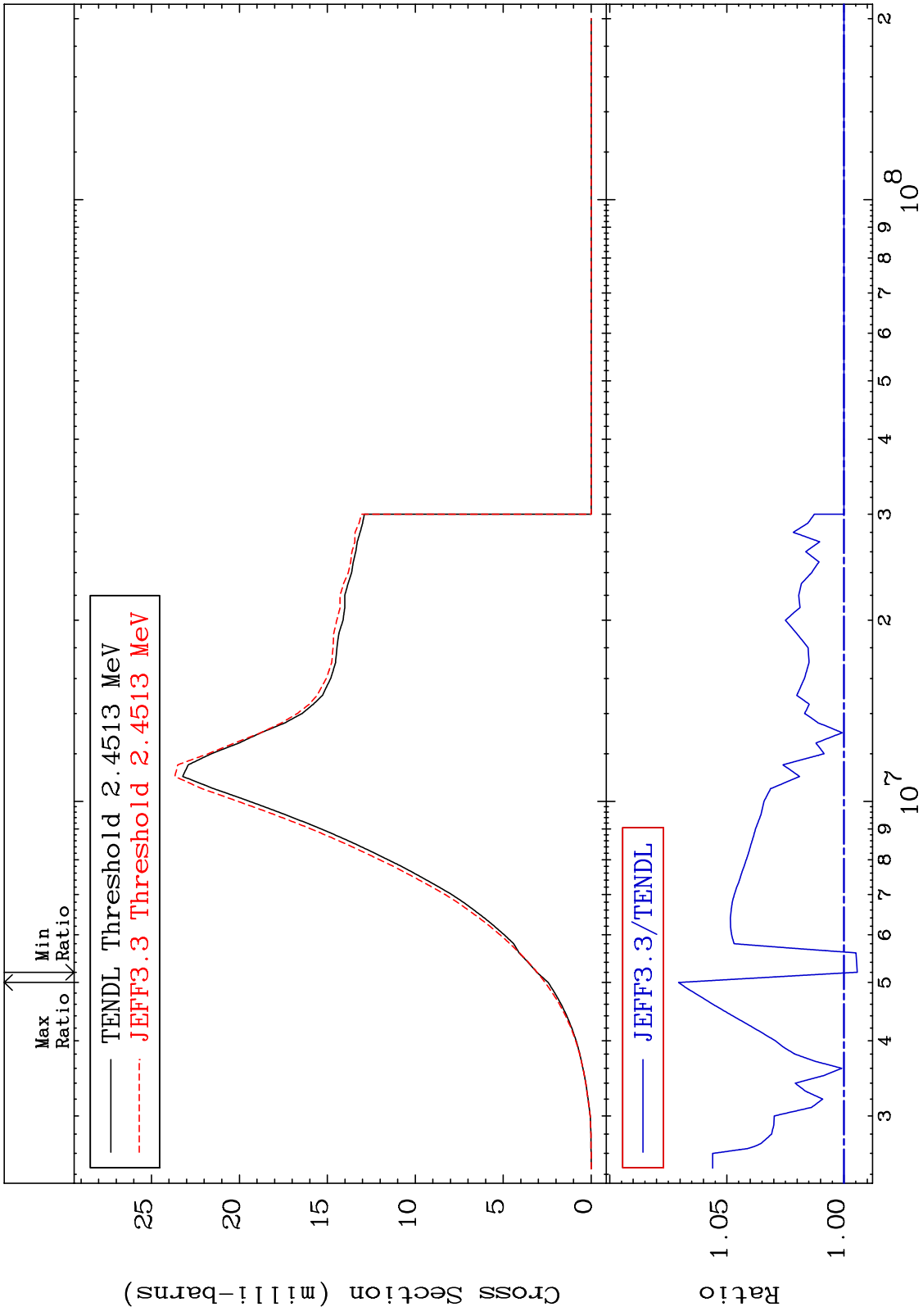
42-Mo-93

MAT 4228

Inelastic: 42-Mo-93m16

42-Mo-93

Radionuclide Production Cross Section -0.569 To 7.059 %



78

Inelastic: 42-Mo-93m16

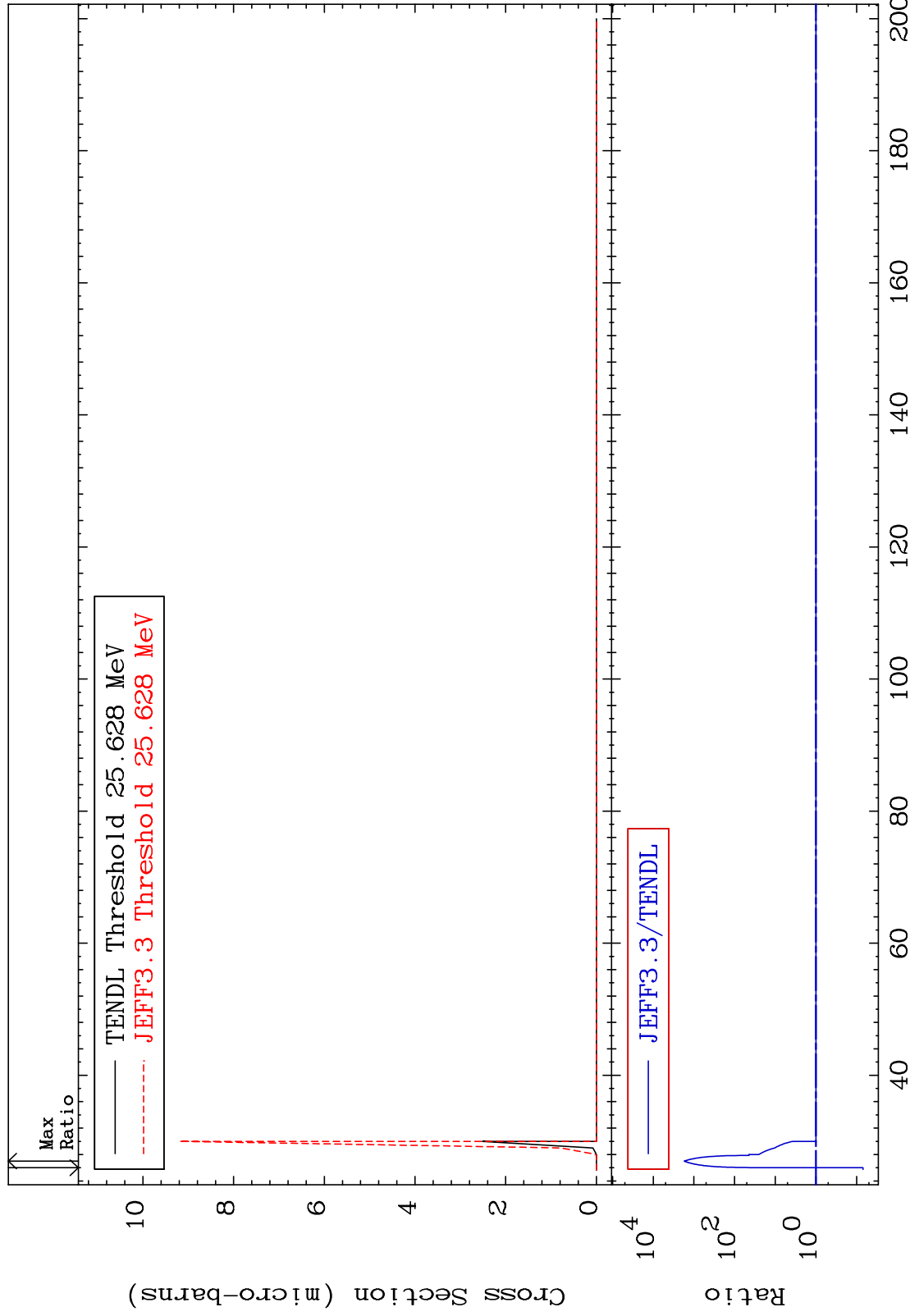
42-Mo-93

MAT 4228

(n,2n) d: 41-Nb-90g

42-Mo-93

Radionuclide Production Cross Section -93.04 To 9999. %

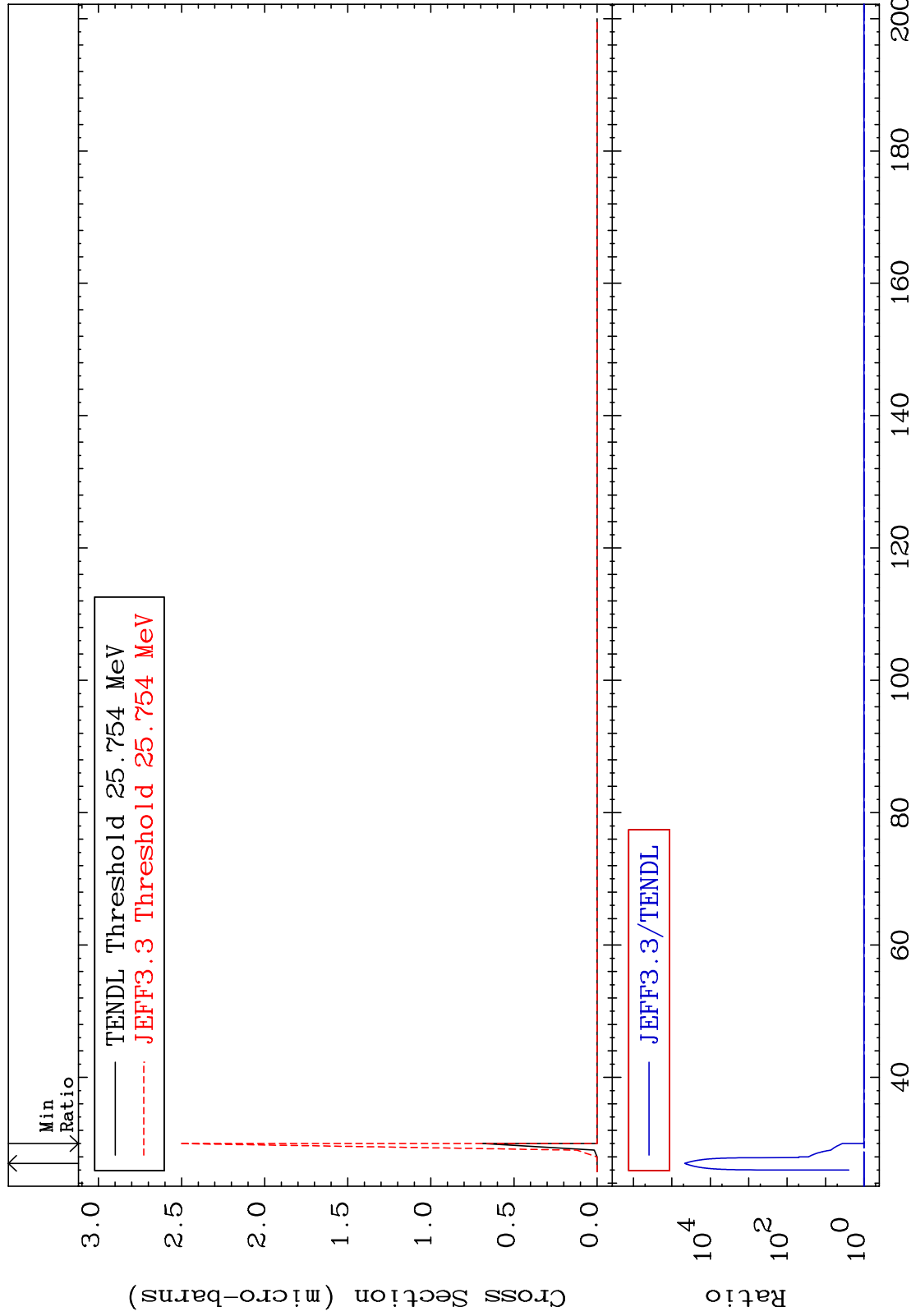


MAT 4228

(n,2n) d:41-Nb-90m2

42-Mo-93

Radionuclide Production Cross Section 0.000 To 9999. %



80

Incident Energy (MeV)

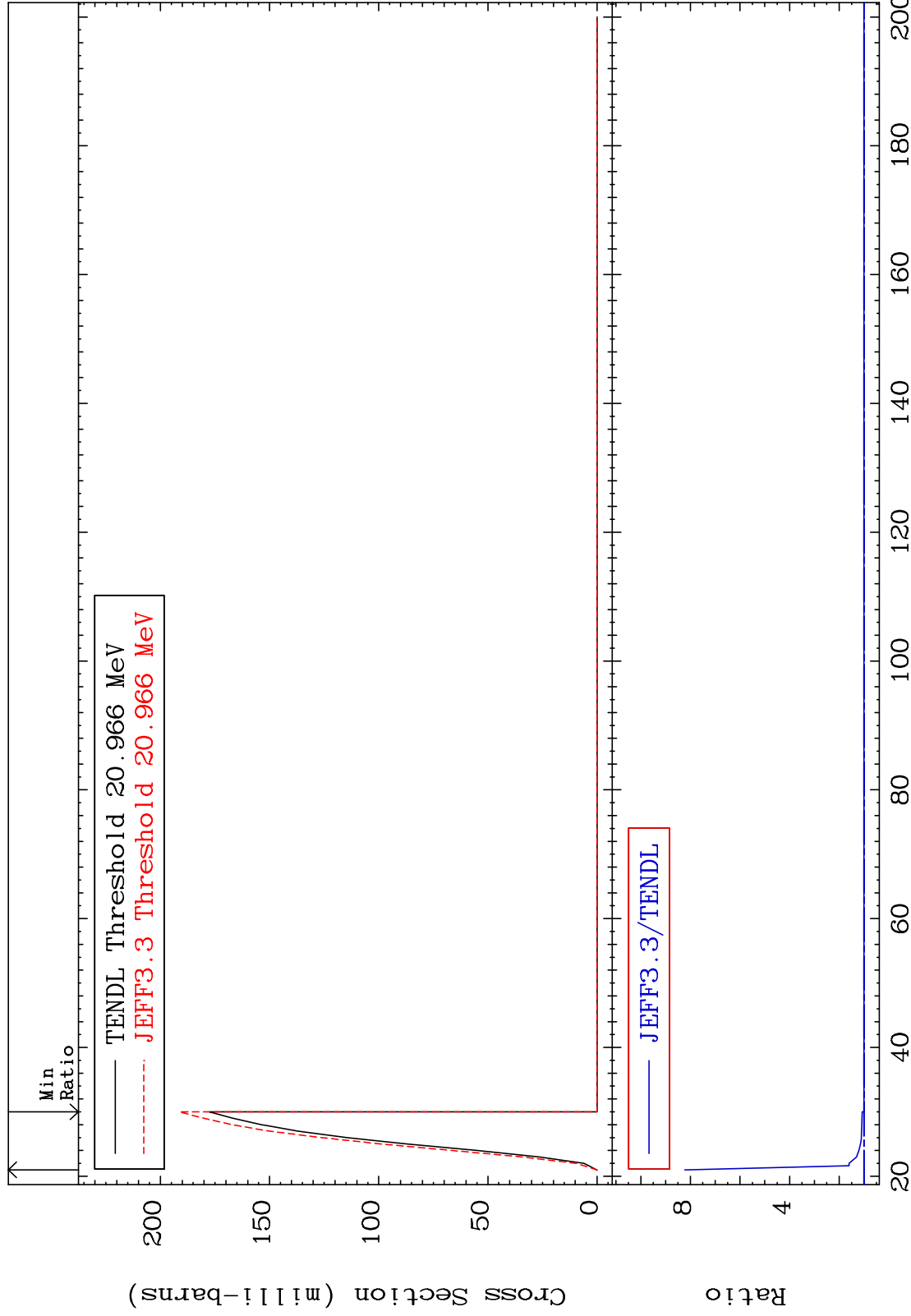
42-Mo-93

MAT 4228

(n,3n) : 42-Mo-91g

42-Mo-93

Radionuclide Production Cross Section 0.000 To 722.6 %



81

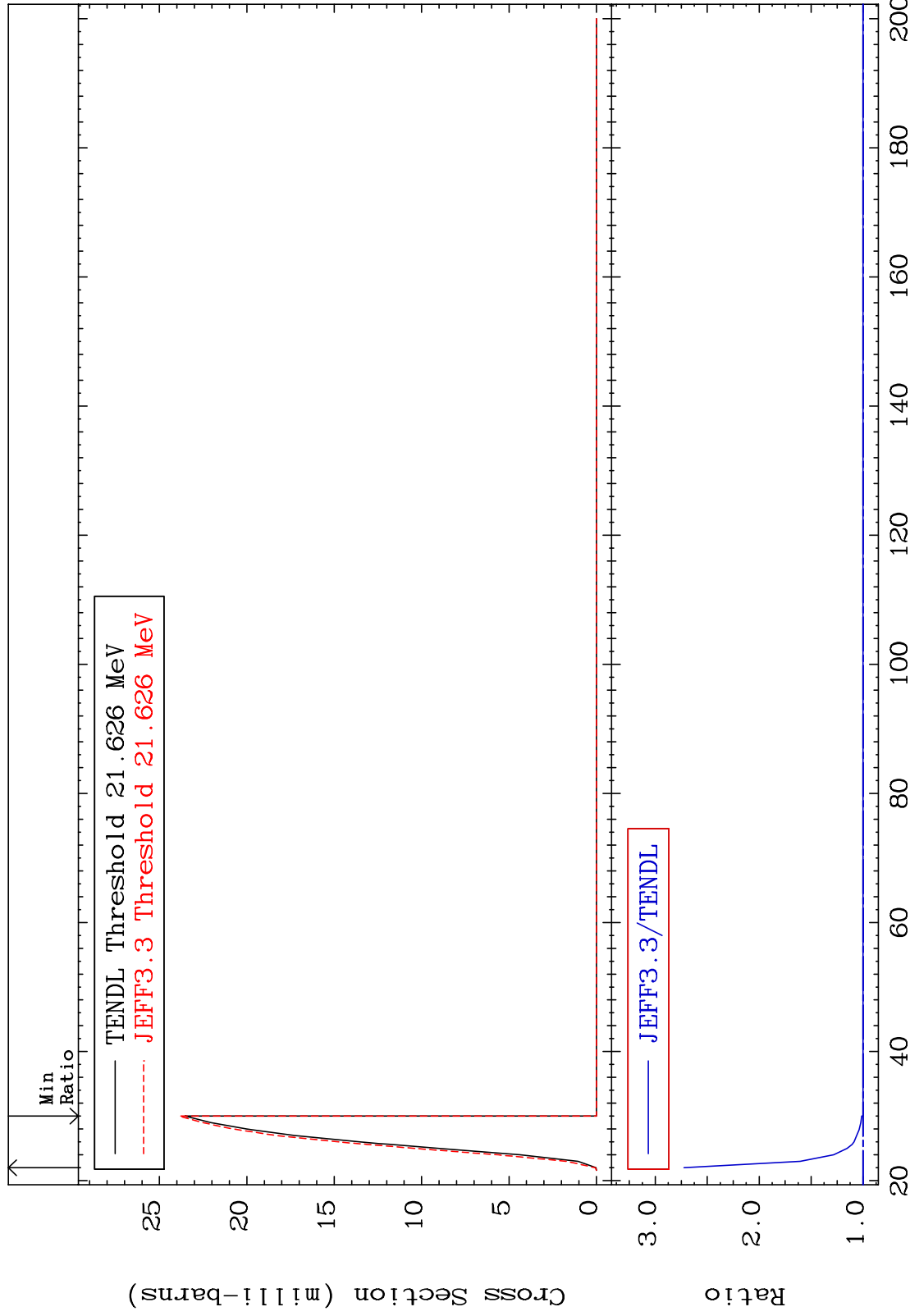
42-Mo-93

MAT 4228

(n,3n) : 42-Mo-91m1

42-Mo-93

Radionuclide Production Cross Section 0.000 To 172.3 %



82

Incident Energy (MeV)

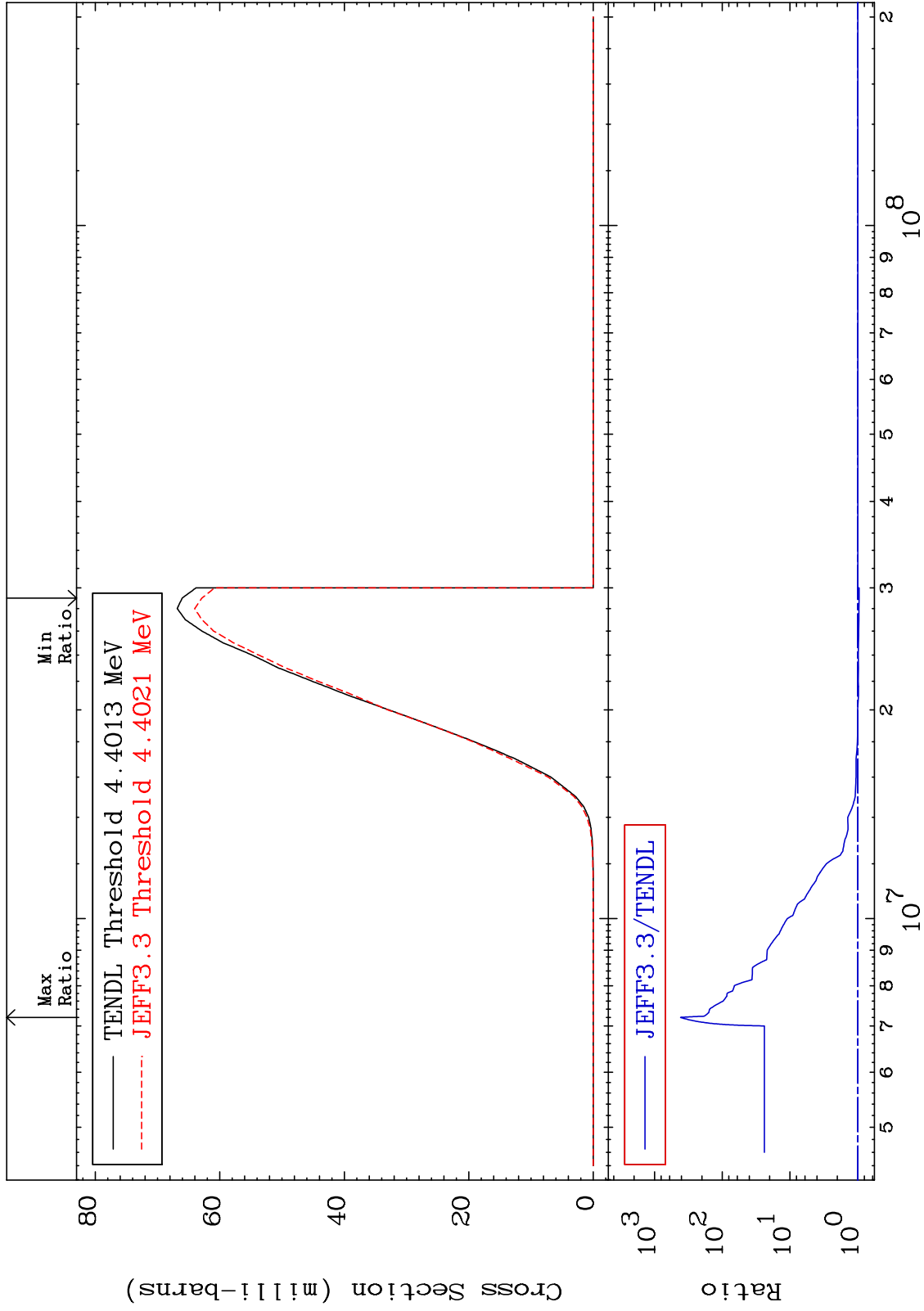
42-Mo-93

MAT 4228

42-Mo-93

(n, n') α : 40-Zr-89g

Radionuclide Production Cross Section -4.787 To 9999. %



83

Incident Energy (eV)

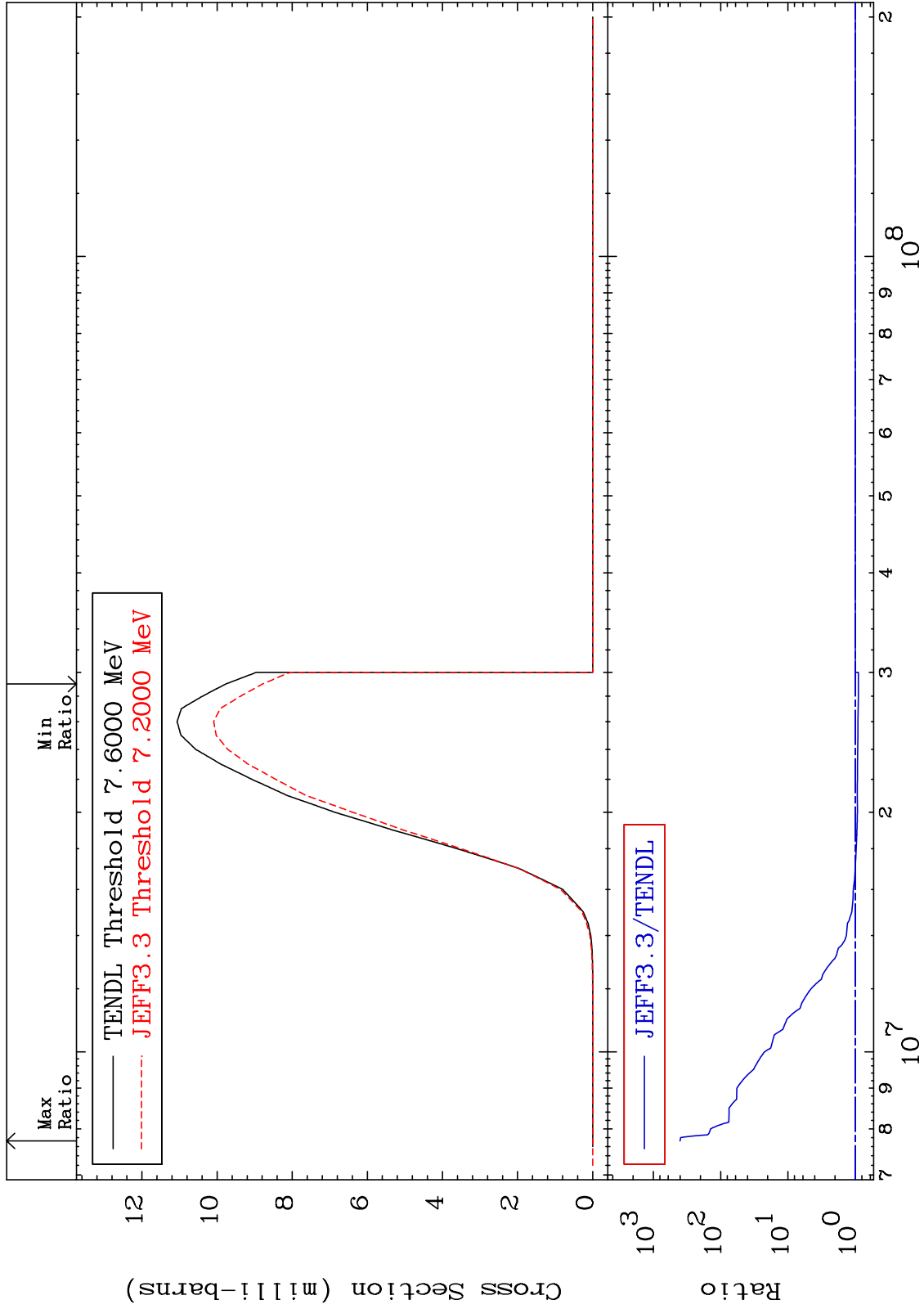
42-Mo-93

MAT 4228

(n, n') α :40-Zr-89m1

42-Mo-93

Radionuclide Production Cross Section -10.01 To 9999. %

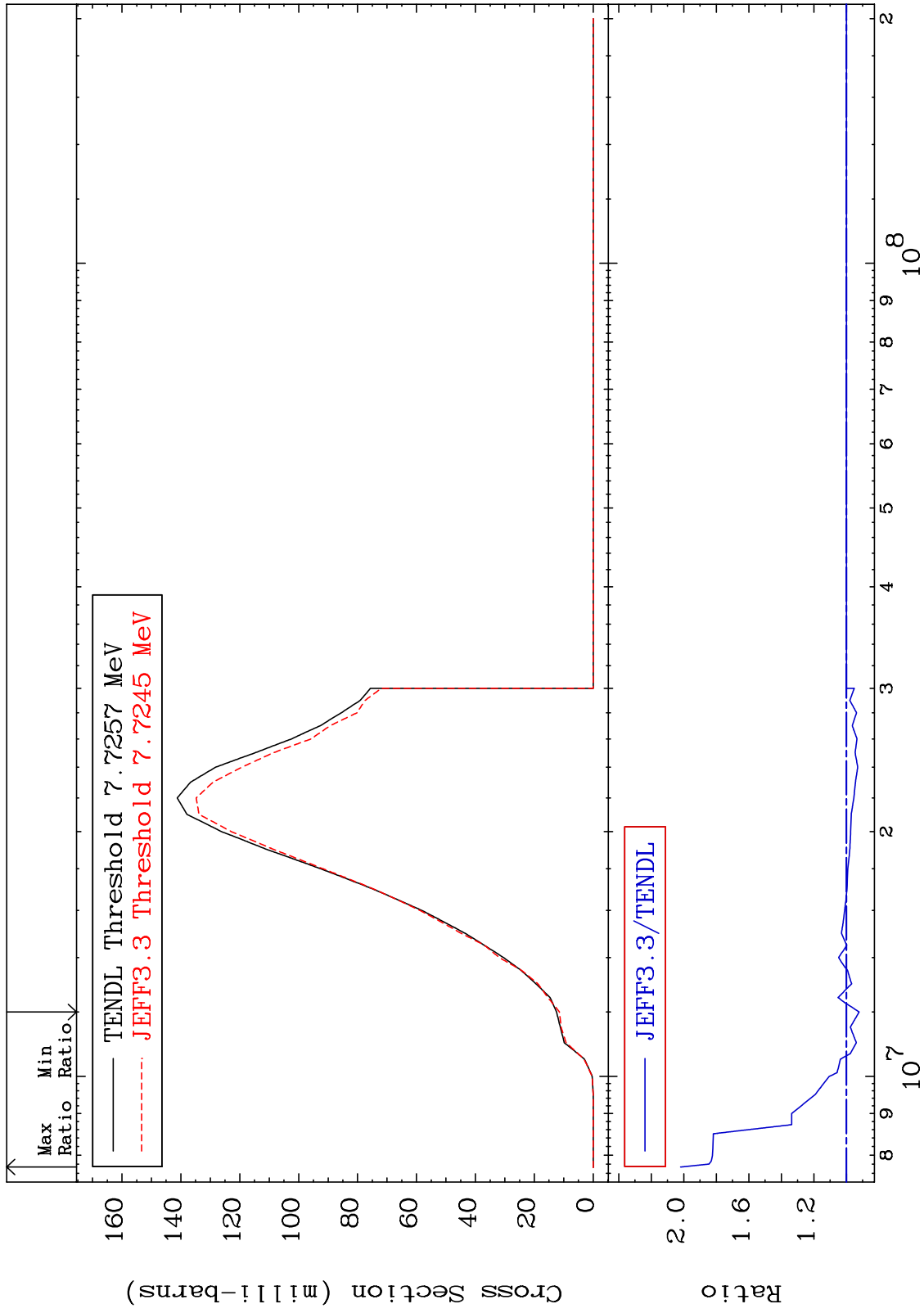


MAT 4228

(n, n') p: 41-Nb-92g

42-Mo-93

Radionuclide Production Cross Section -7.852 To 101.9 %



85

Incident Energy (eV)

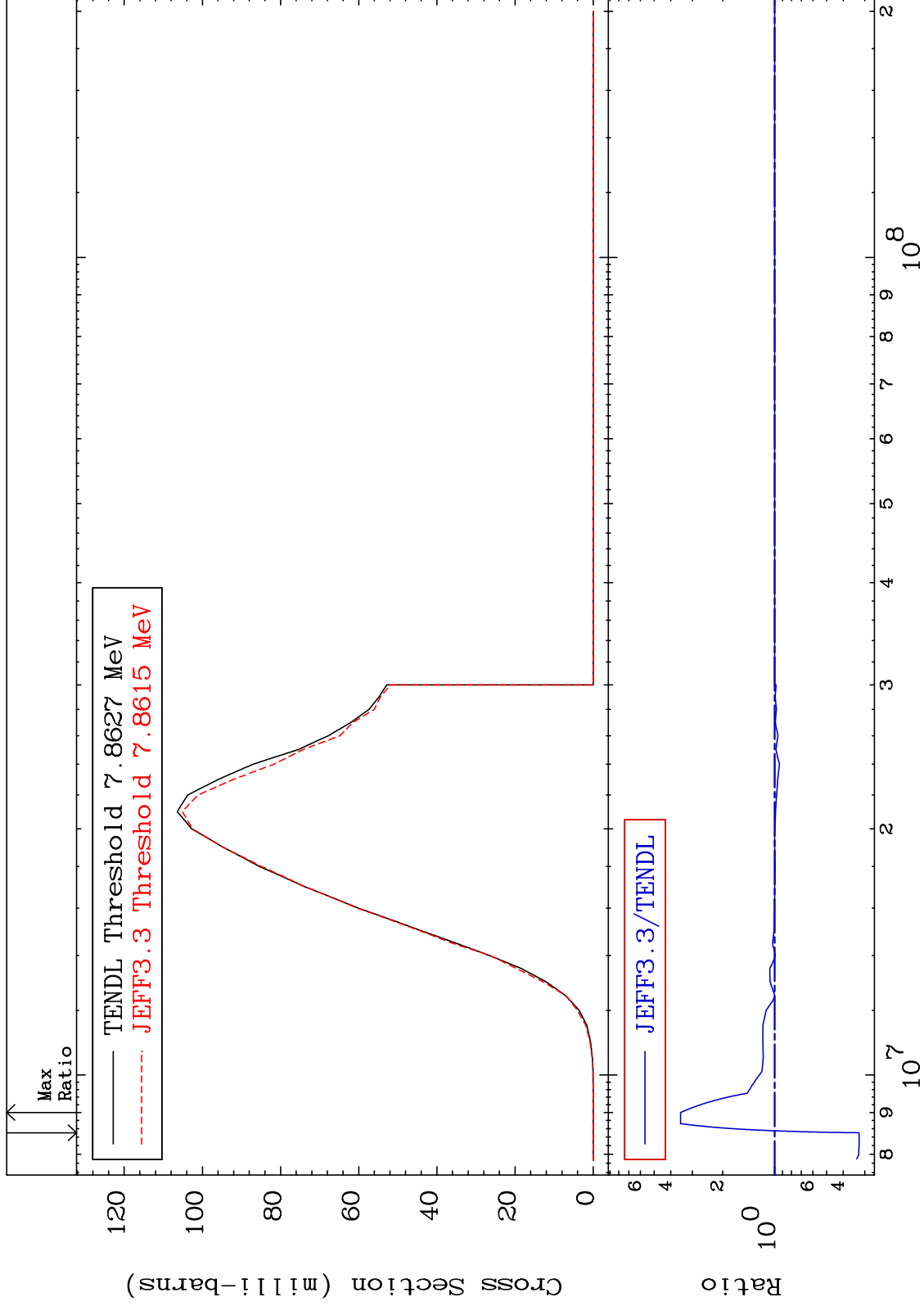
42-Mo-93

MAT 4228

(n, n') p:41-Nb-92m1

42-Mo-93

Radionuclide Production Cross Section -67.64 To 250.7 %

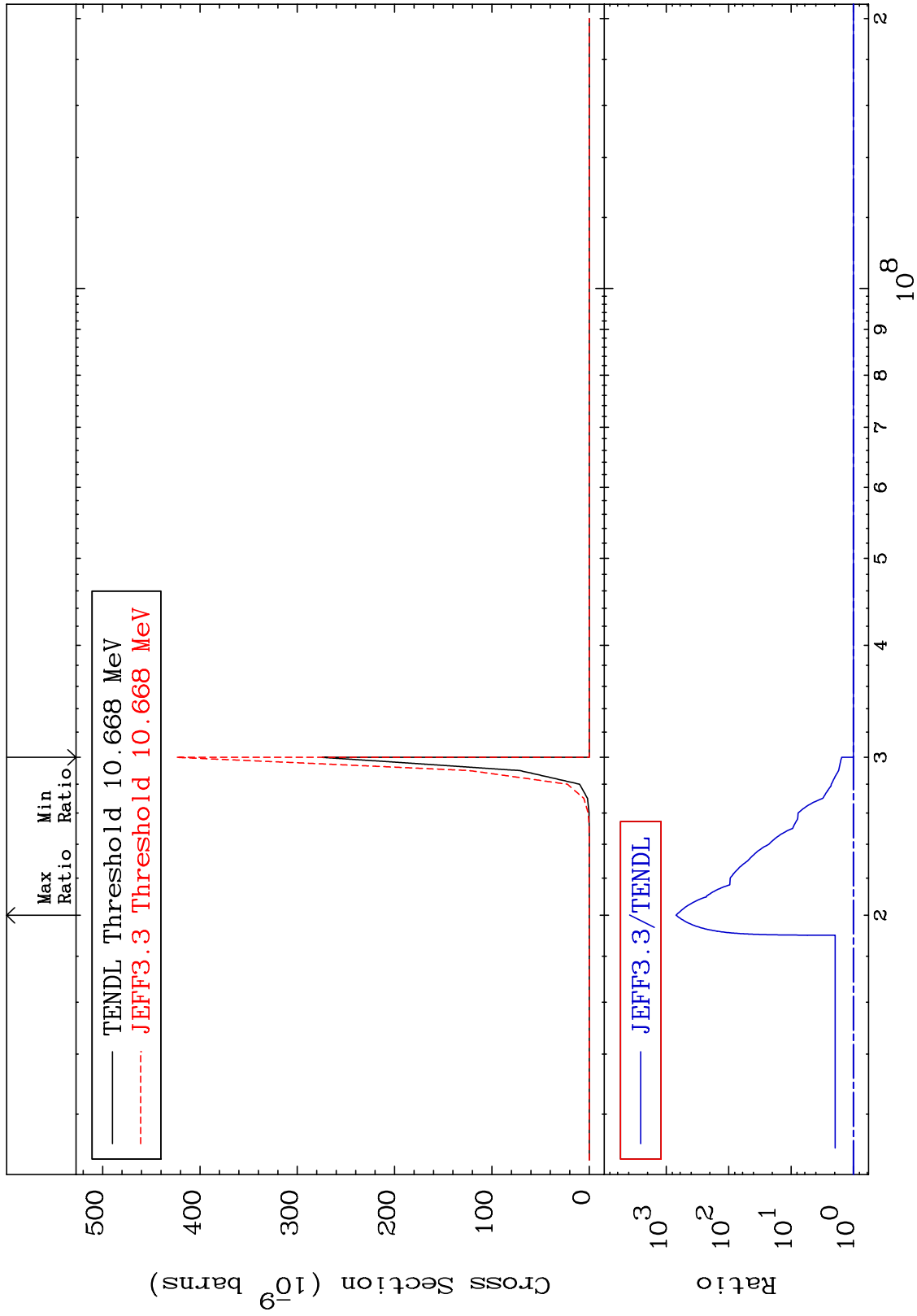


MAT 4228

42-Mo-93

(n, n') 2α:38-Sr-85g

Radionuclide Production Cross Section 0.000 To 9999. %

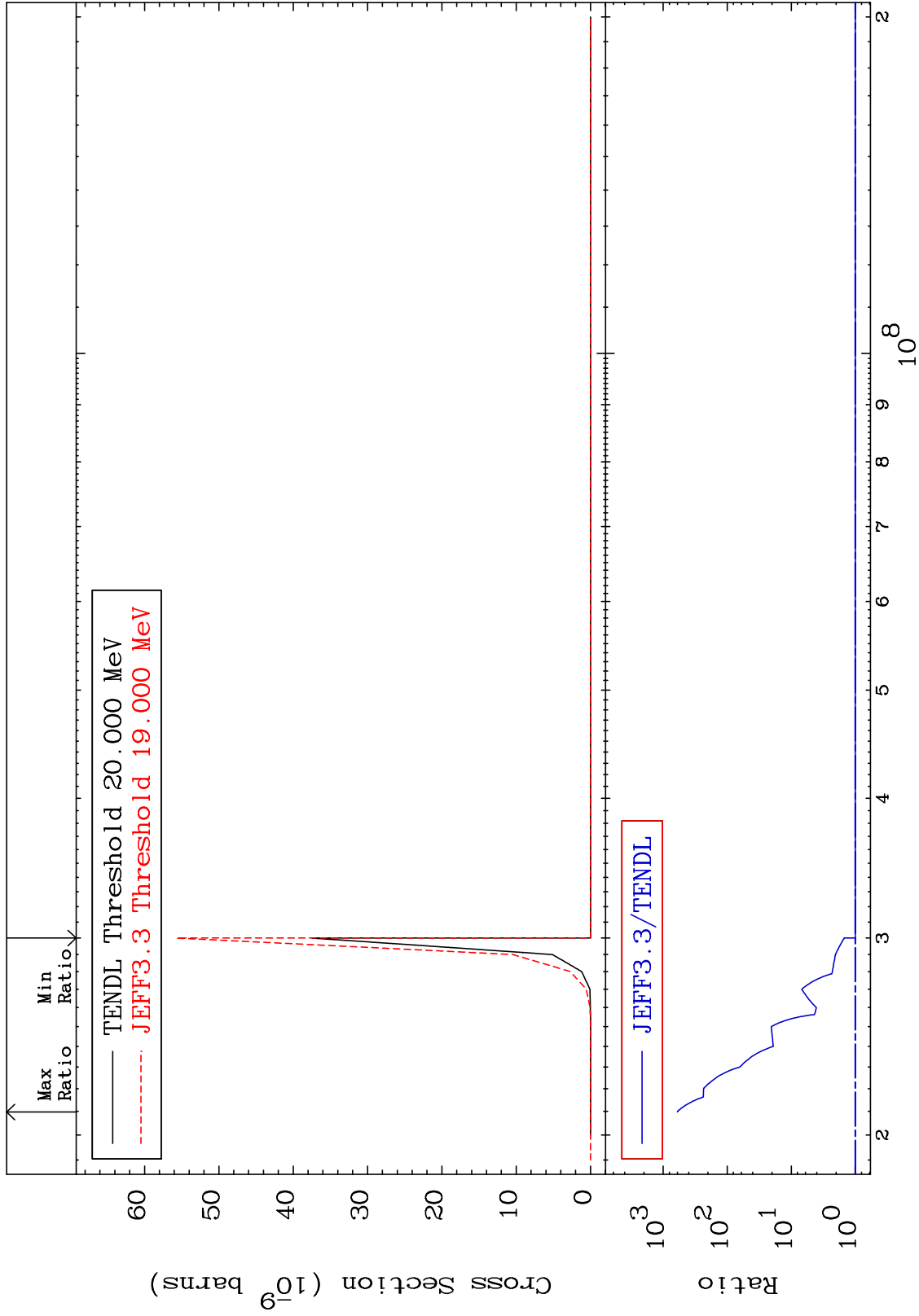


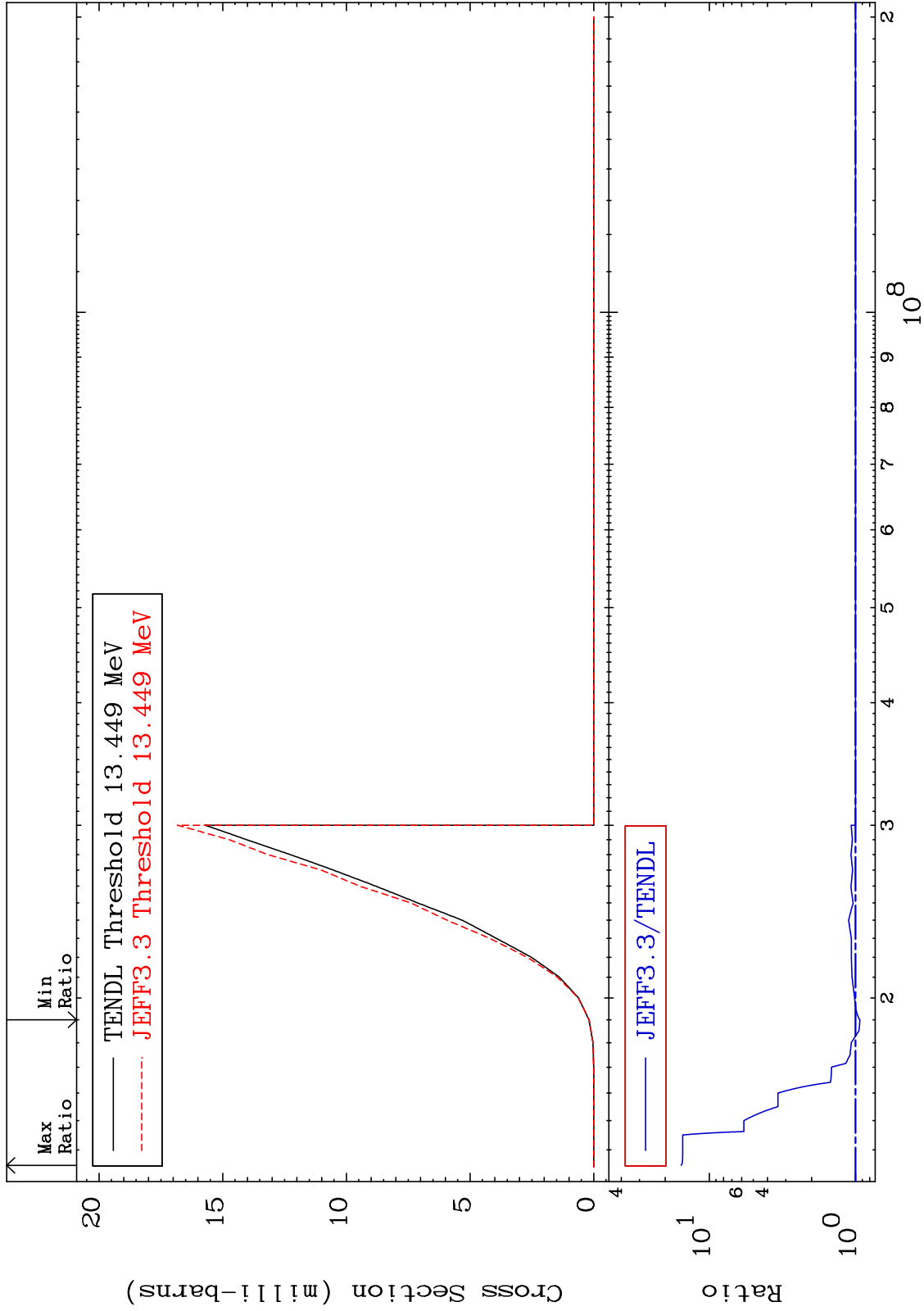
MAT 4228

(n, n') $^{2\alpha}$: 38 Sr- 85 m2

42-Mo-93

Radionuclide Production Cross Section 0.000 To 9999. %



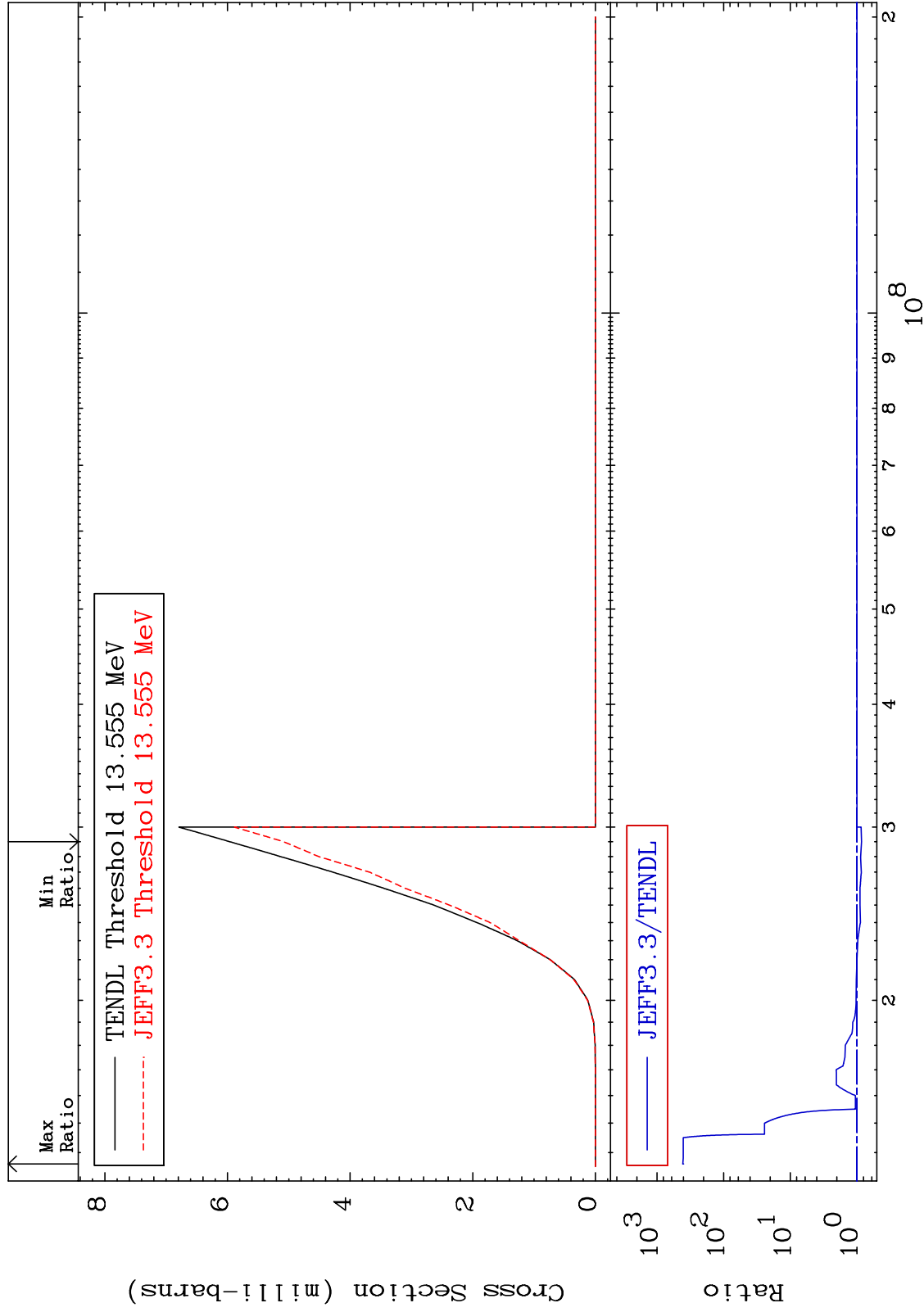


MAT 4228

(n, n') d:41-Nb-91m1

42-Mo-93

Radionuclide Production Cross Section -14.73 To 9999. %



90

Incident Energy (eV)

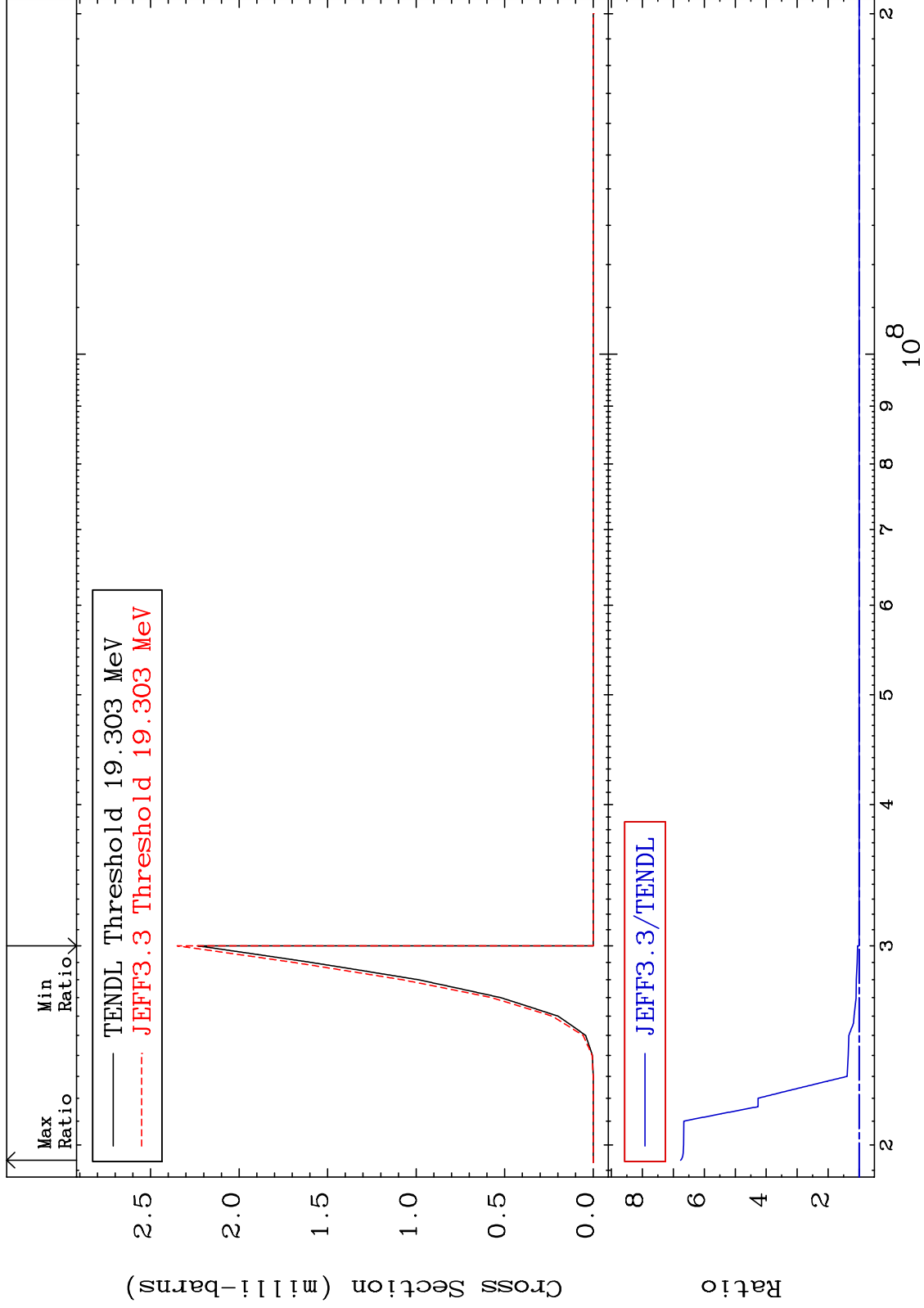
42-Mo-93

MAT 4228

(n, n') t: 41-Nb-90g

42-Mo-93

Radionuclide Production Cross Section 0.000 To 576.3 %



91

Incident Energy (eV)

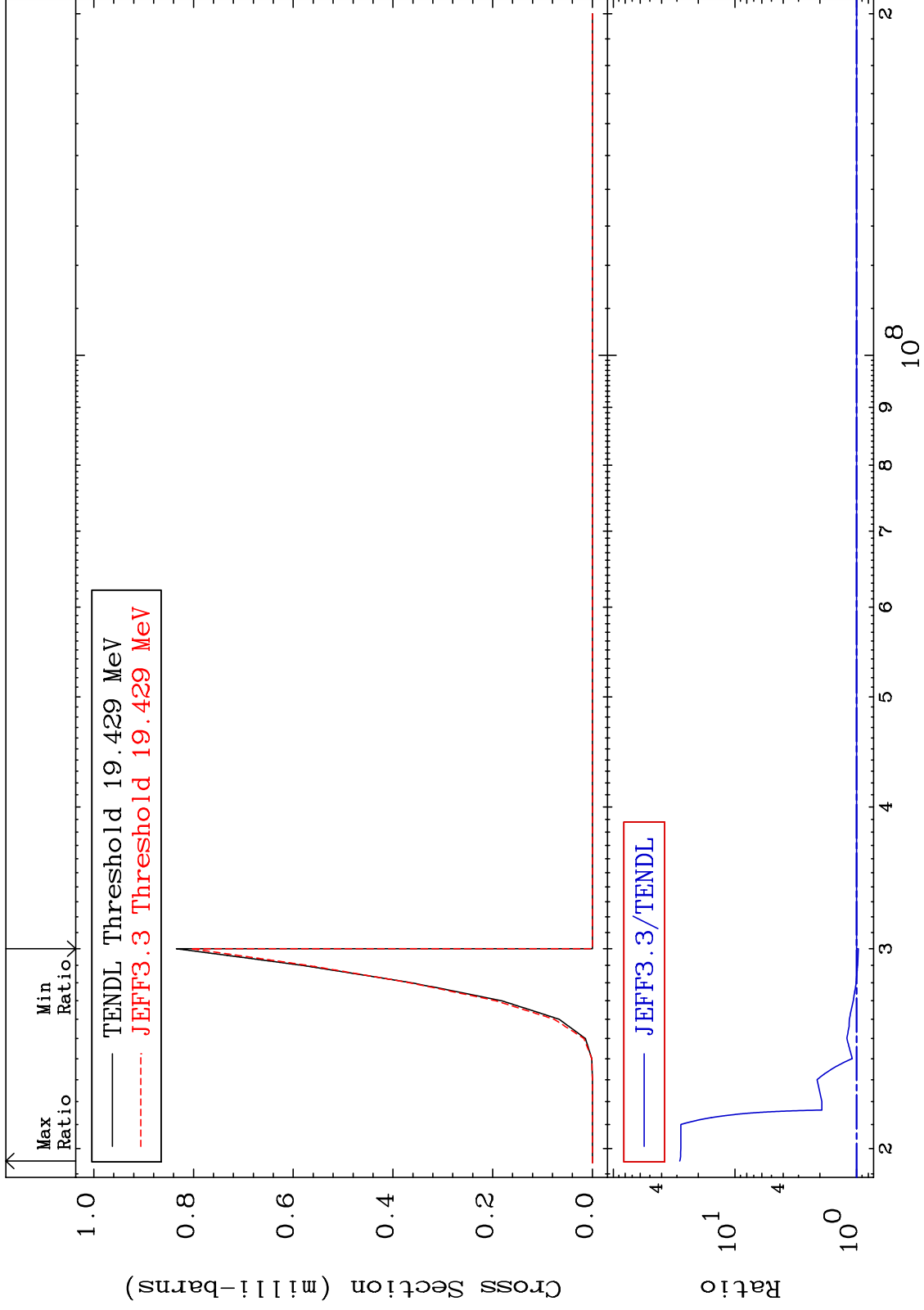
42-Mo-93

MAT 4228

(n, n') t:41-Nb-90m2

42-Mo-93

Radionuclide Production Cross Section -3.387 To 2739. %



92

Incident Energy (eV)

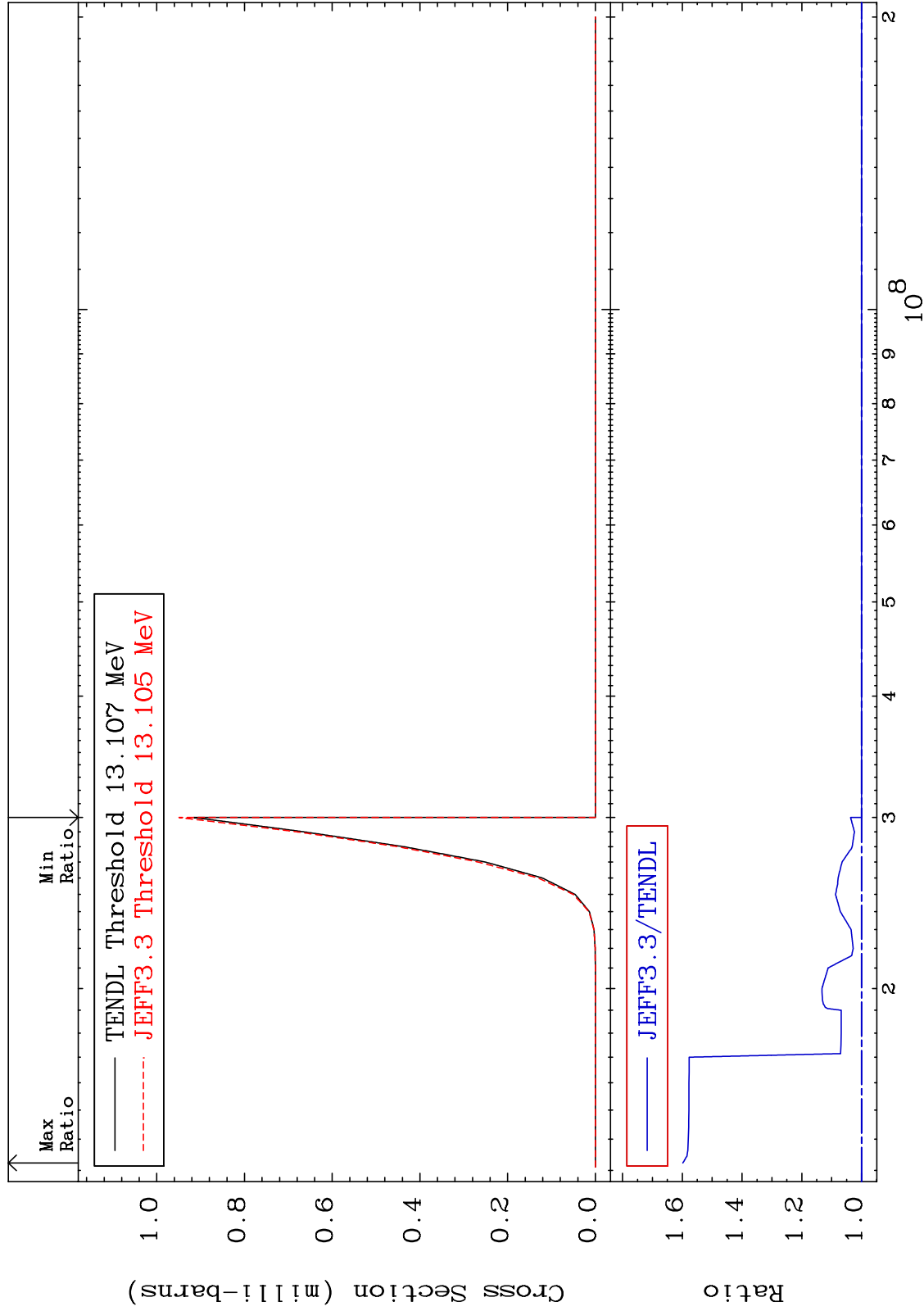
42-Mo-93

MAT 4228

(n, n') He-3: 40-Zr-90g

42-Mo-93

Radionuclide Production Cross Section 0.000 To 59.81 %



93

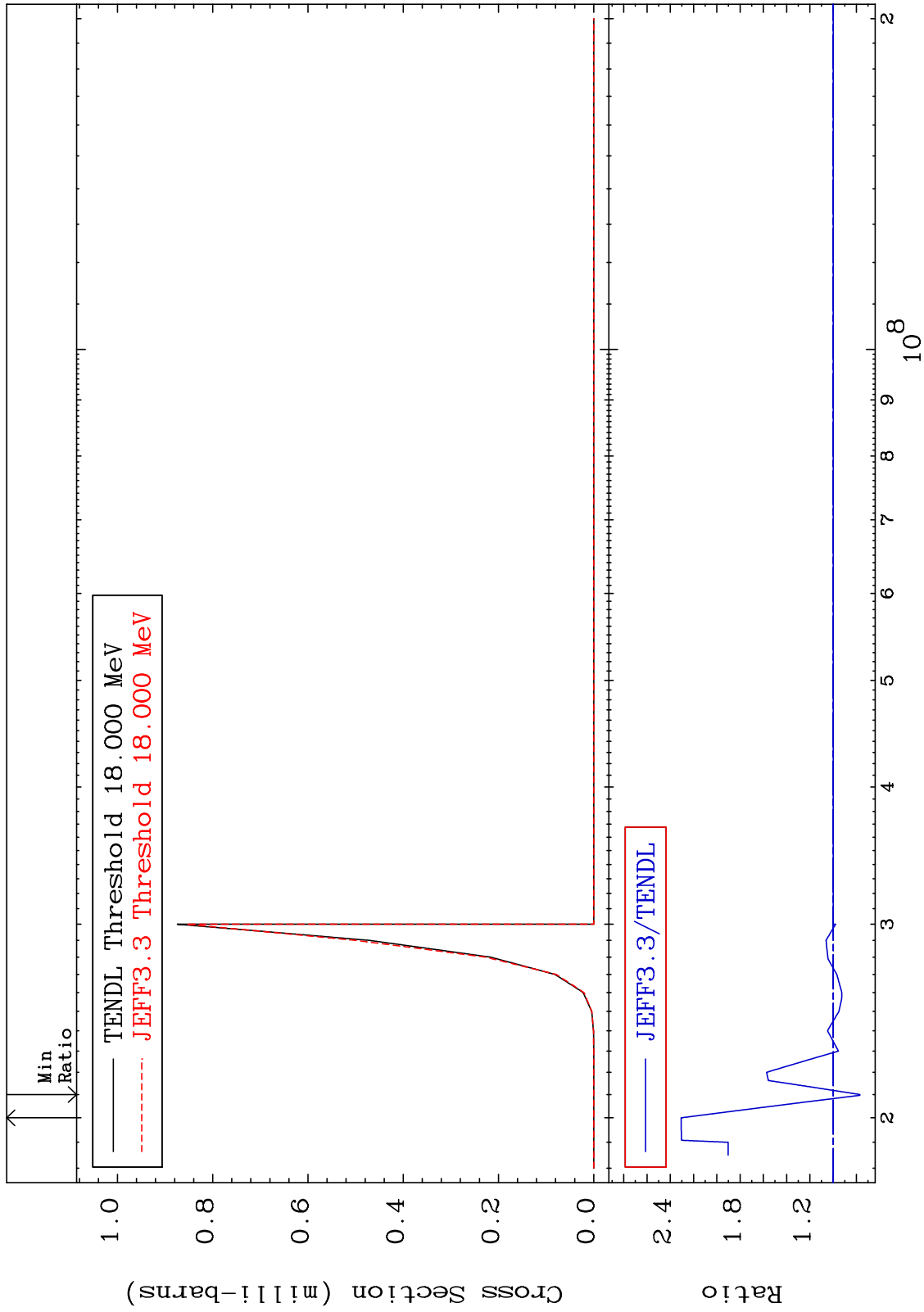
42-Mo-93

MAT 4228

(n, n') He-3:40-Zr-90m3

42-Mo-93

Radionuclide Production Cross Section -23.03 To 130.6 %

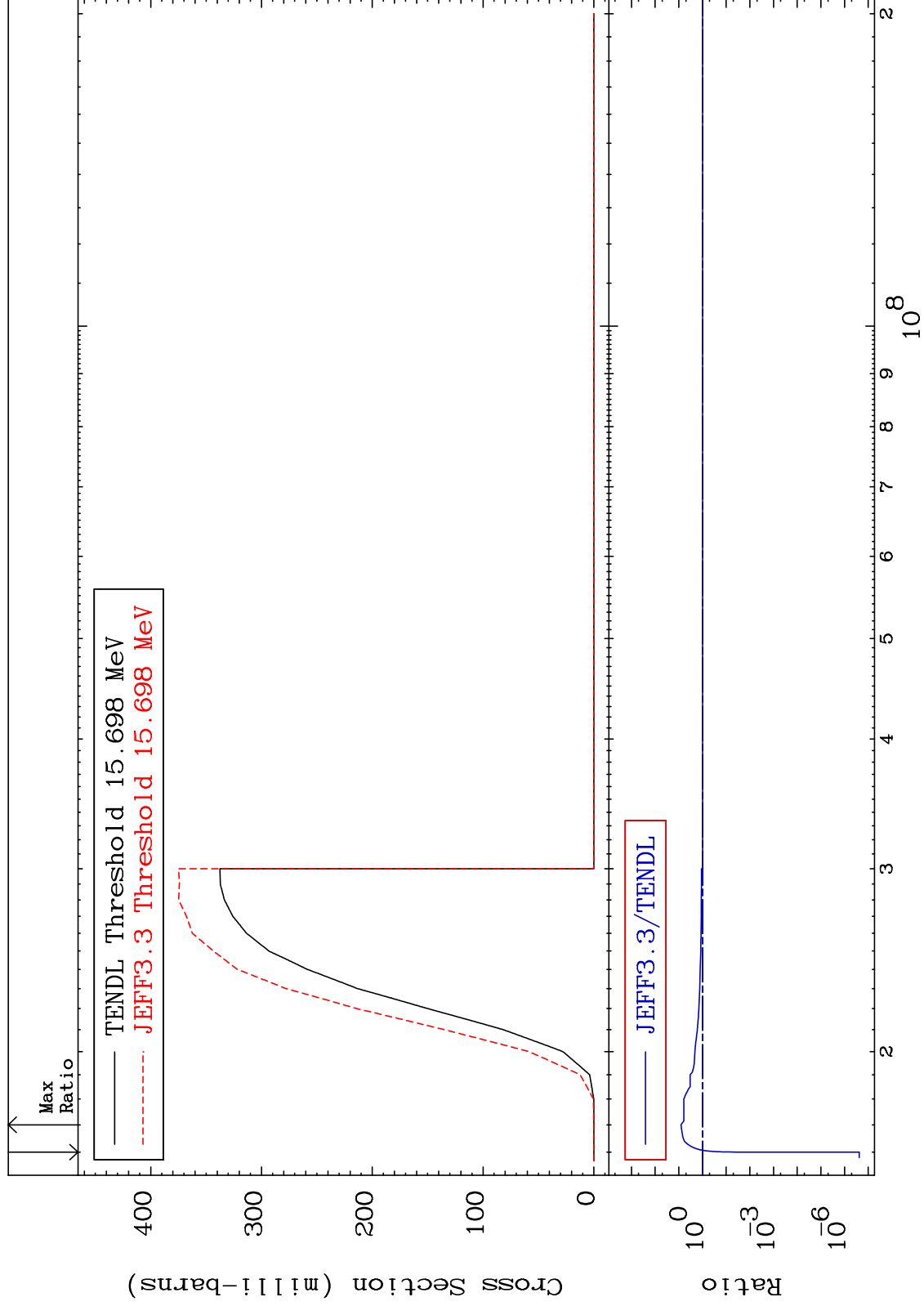


MAT 4228

(n,2n) p: 41-Nb-91g

42-Mo-93

Radionuclide Production Cross Section -100.0 To 701.0 %



95

Incident Energy (eV)

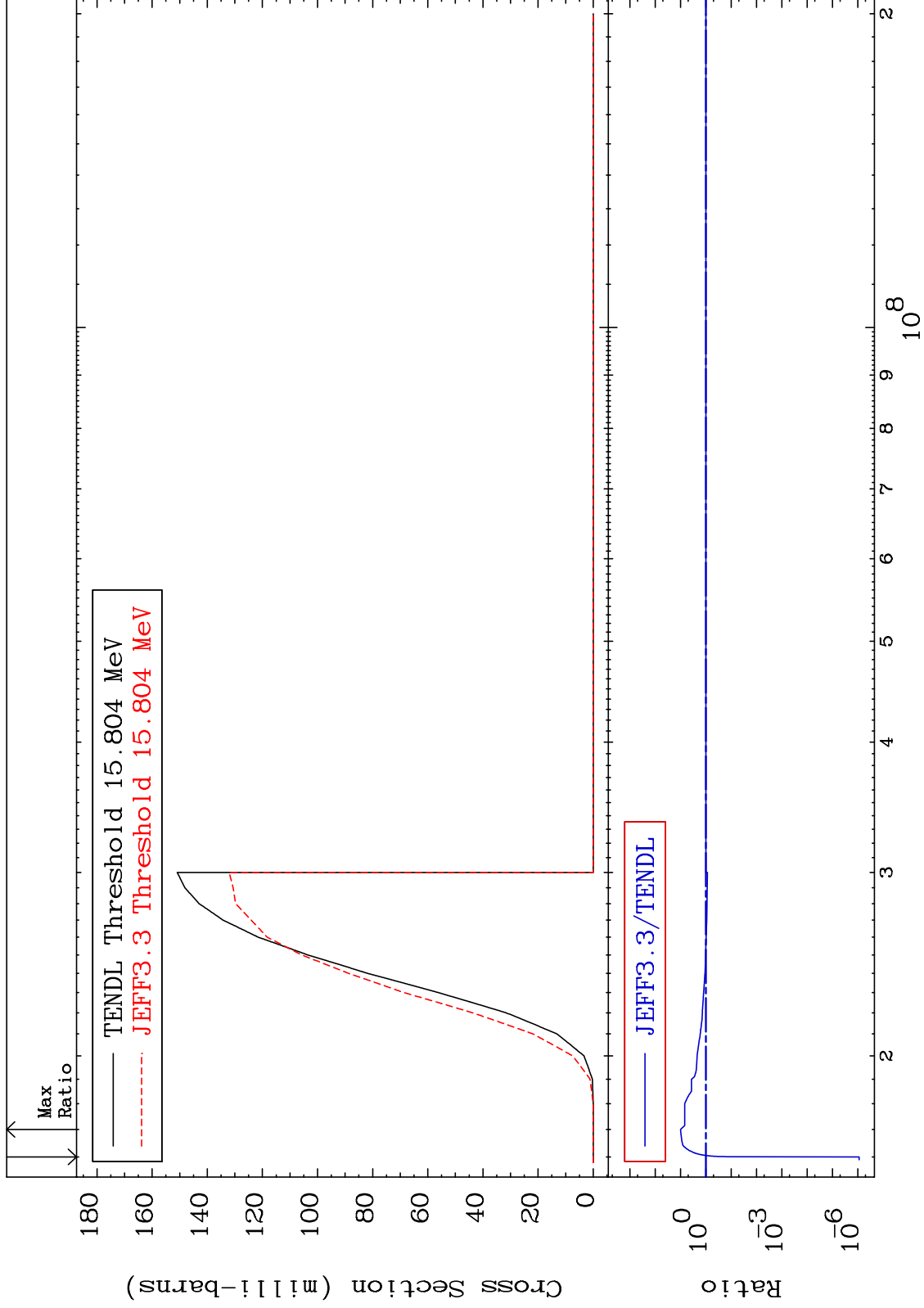
42-Mo-93

MAT 4228

(n,2n) p:41-Nb-91m1

42-Mo-93

Radionuclide Production Cross Section -100.0 To 892.1 %

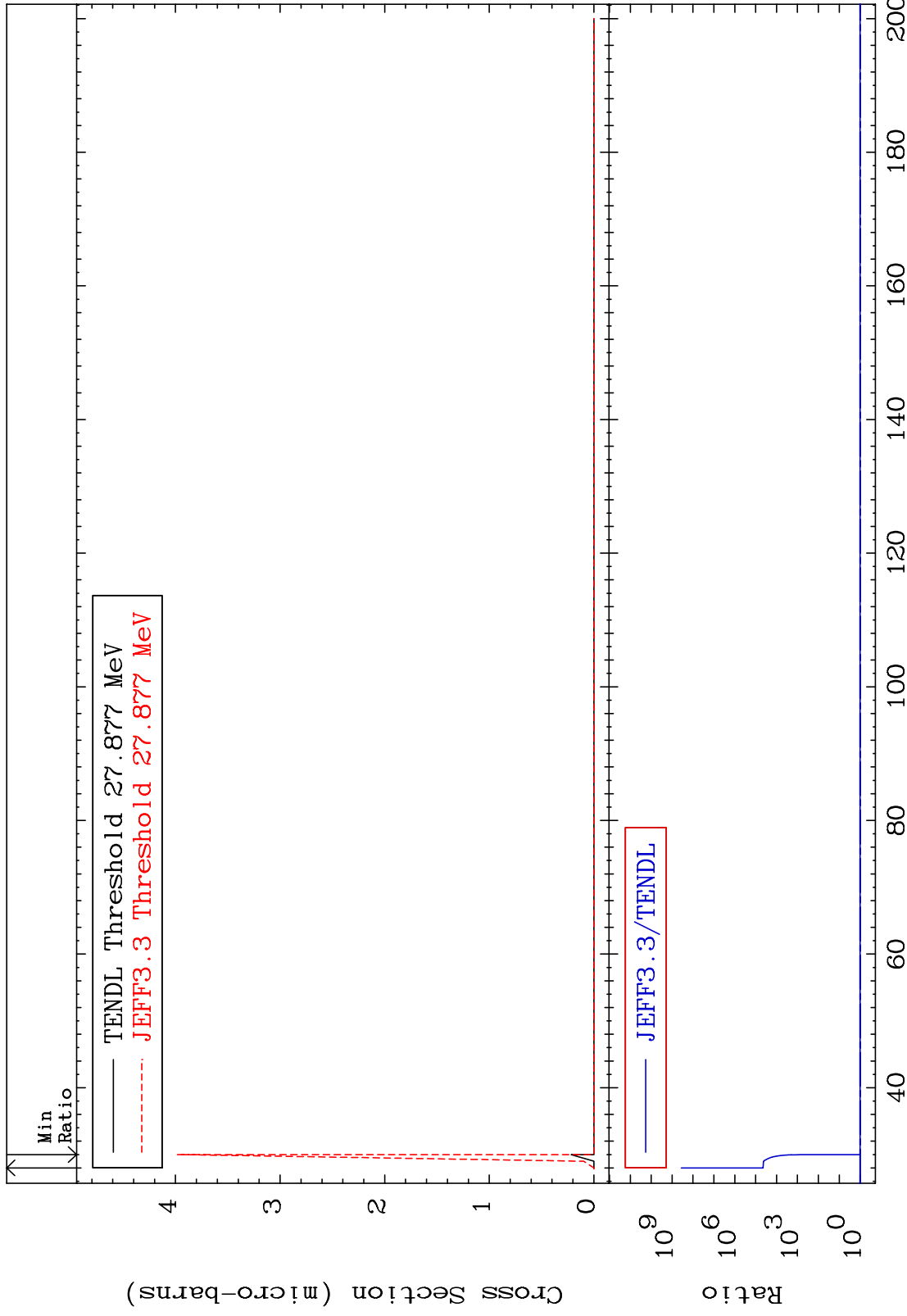


MAT 4228

(n,3n) p:41-Nb-90g

42-Mo-93

Radionuclide Production Cross Section 0.000 To 9999. %

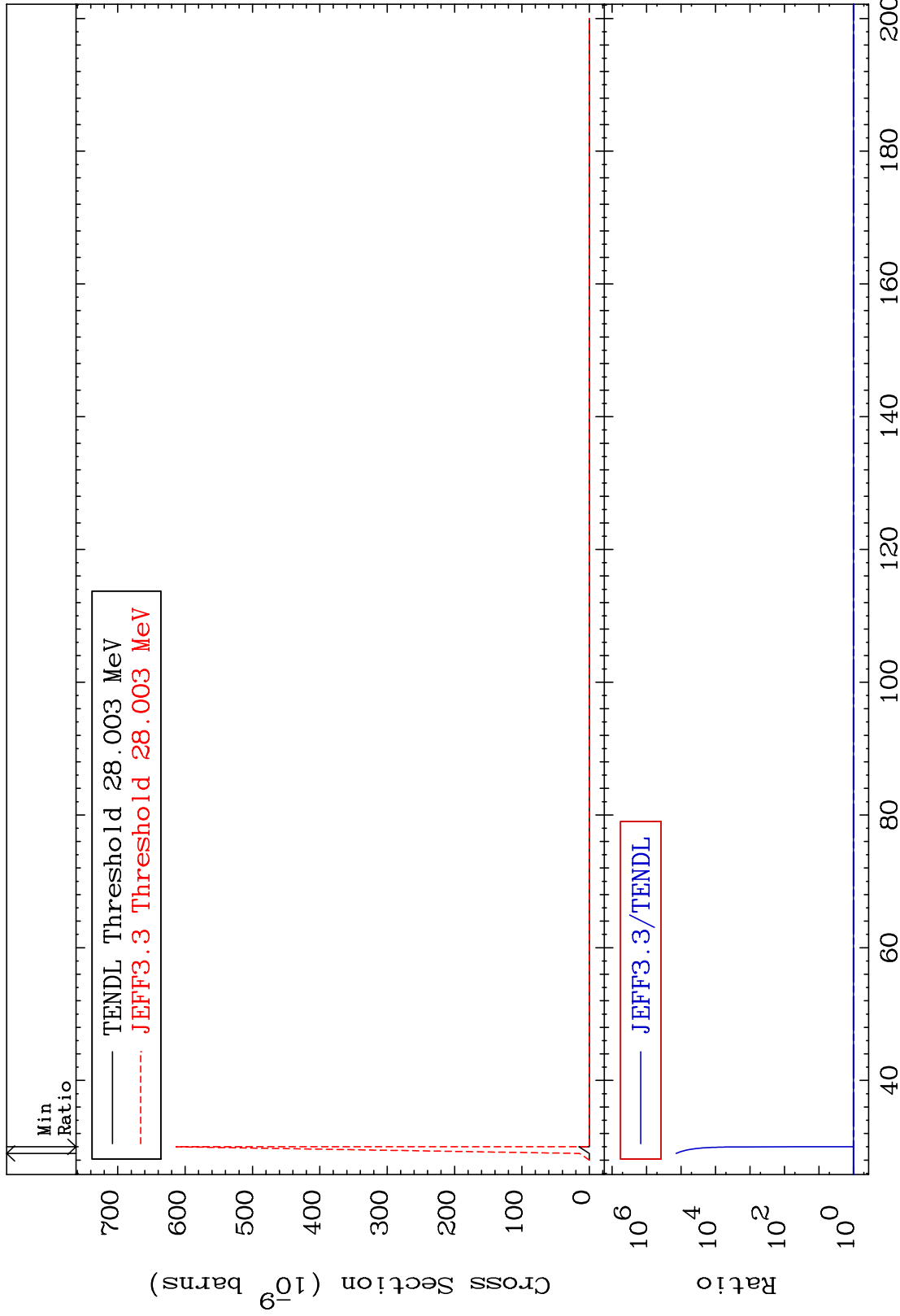


MAT 4228

(n,3n) p:41-Nb-90m2

42-Mo-93

Radionuclide Production Cross Section 0.000 To 9999. %

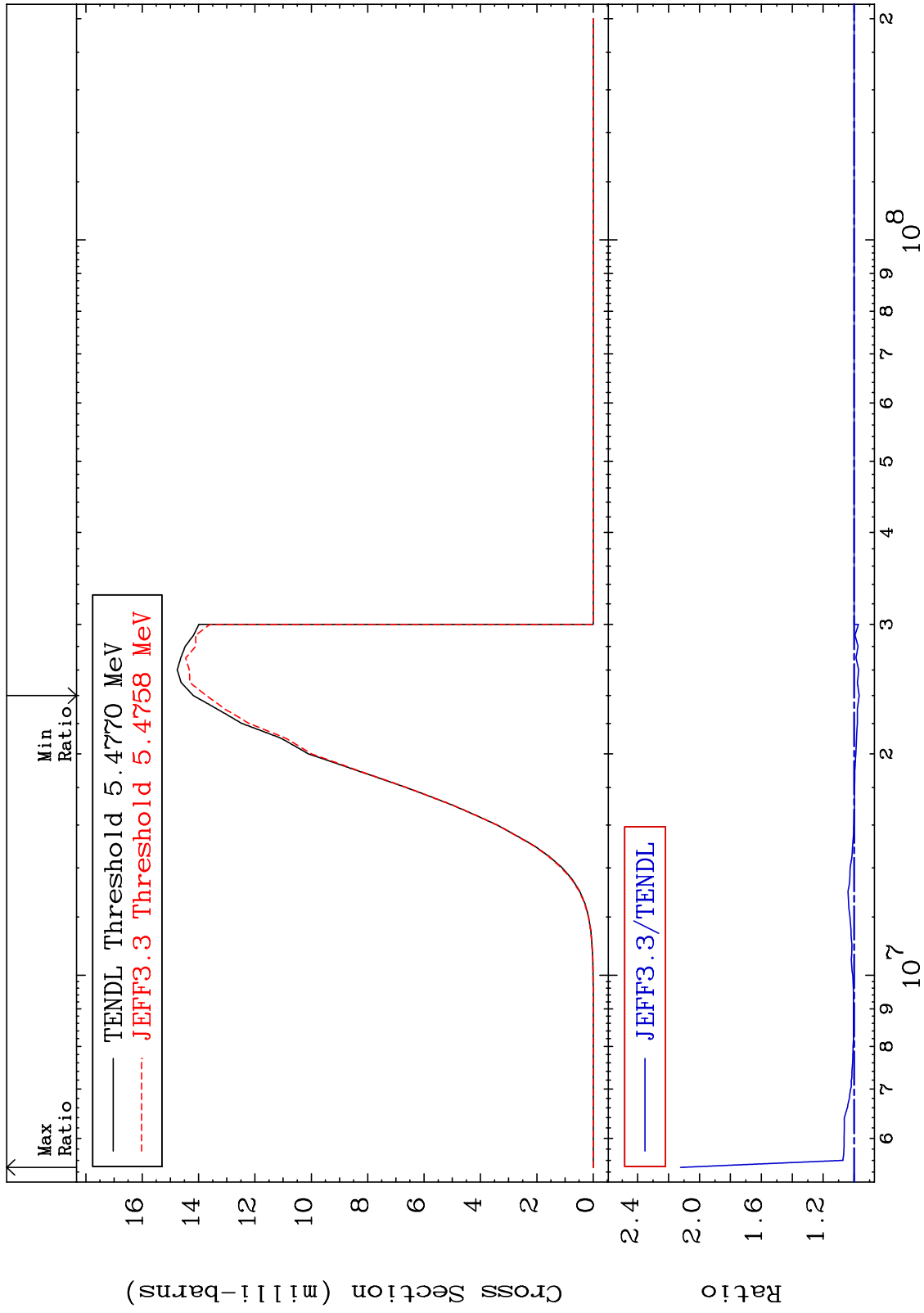


MAT 4228

42-Mo-93

(n, d) : 41-Nb-92g

Radionuclide Production Cross Section -3.267 To 112.2 %



99

Incident Energy (eV)

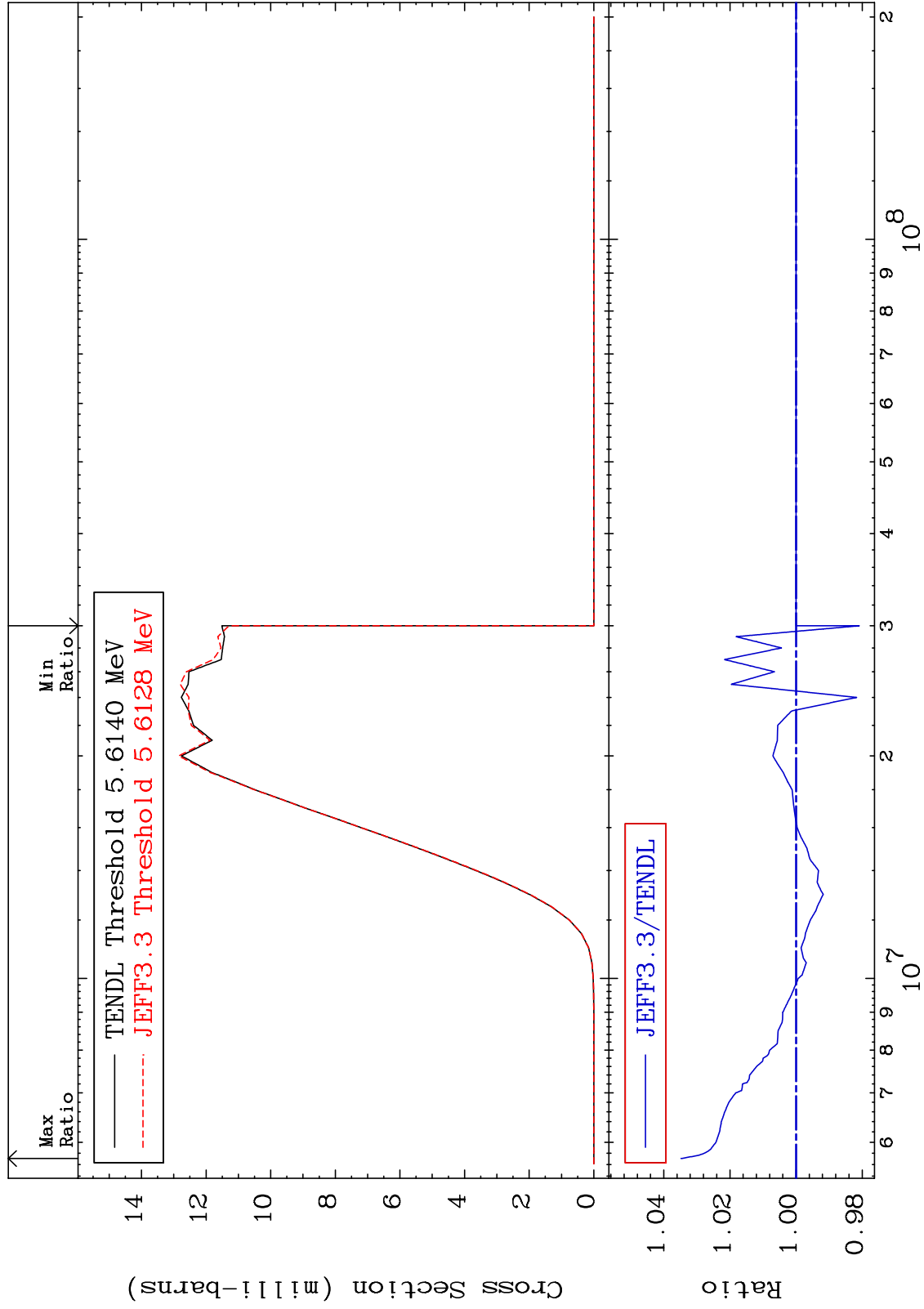
42-Mo-93

MAT 4228

(n, d): 41-Nb-92m1

42-Mo-93

Radionuclide Production Cross Section -1.912 To 3.478 %



100

Incident Energy (eV)

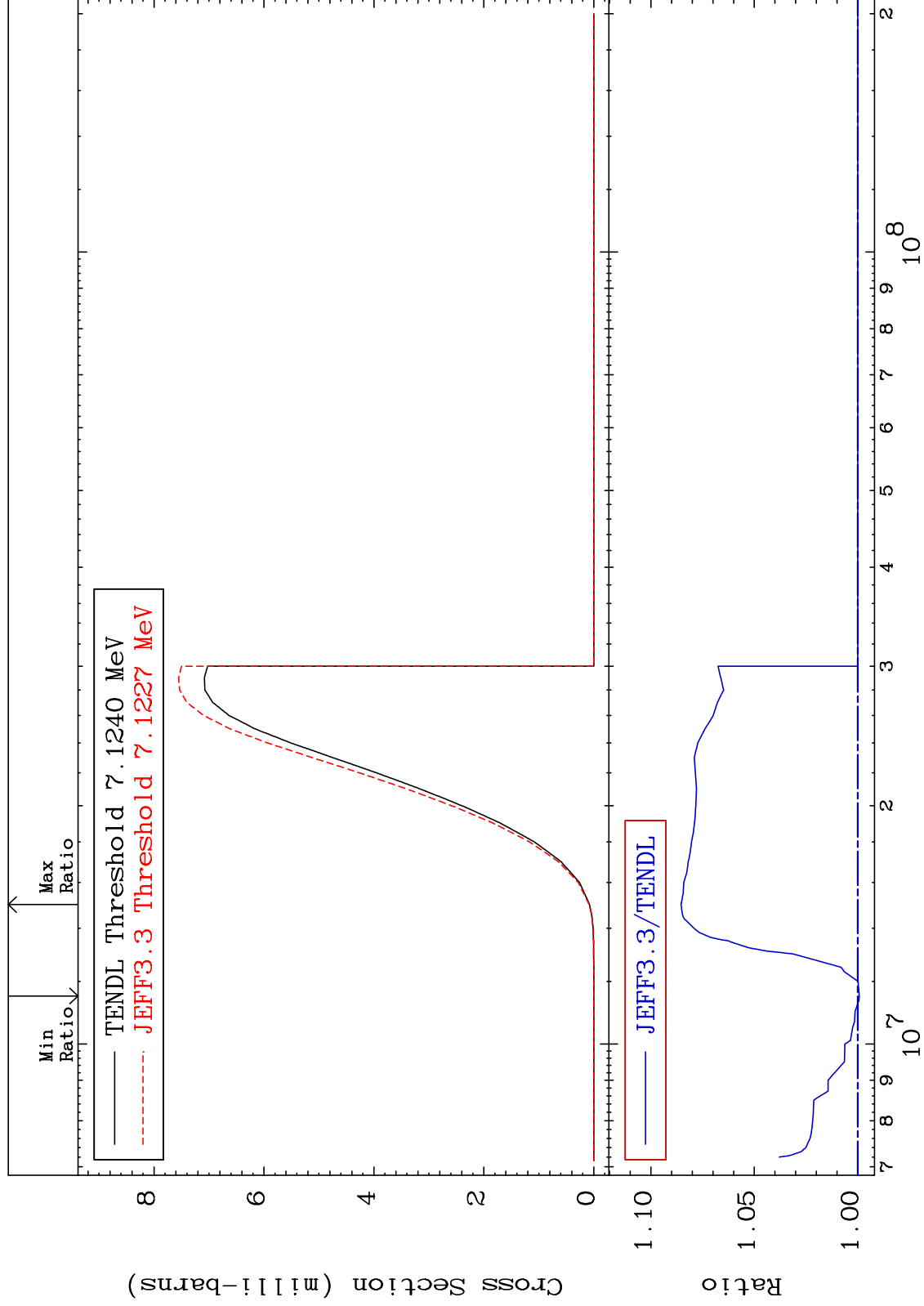
42-Mo-93

MAT 4228

(n, t) : 41-Nb-91g

42-Mo-93

Radionuclide Production Cross Section -0.077 To 8.543 %



101

Incident Energy (eV)

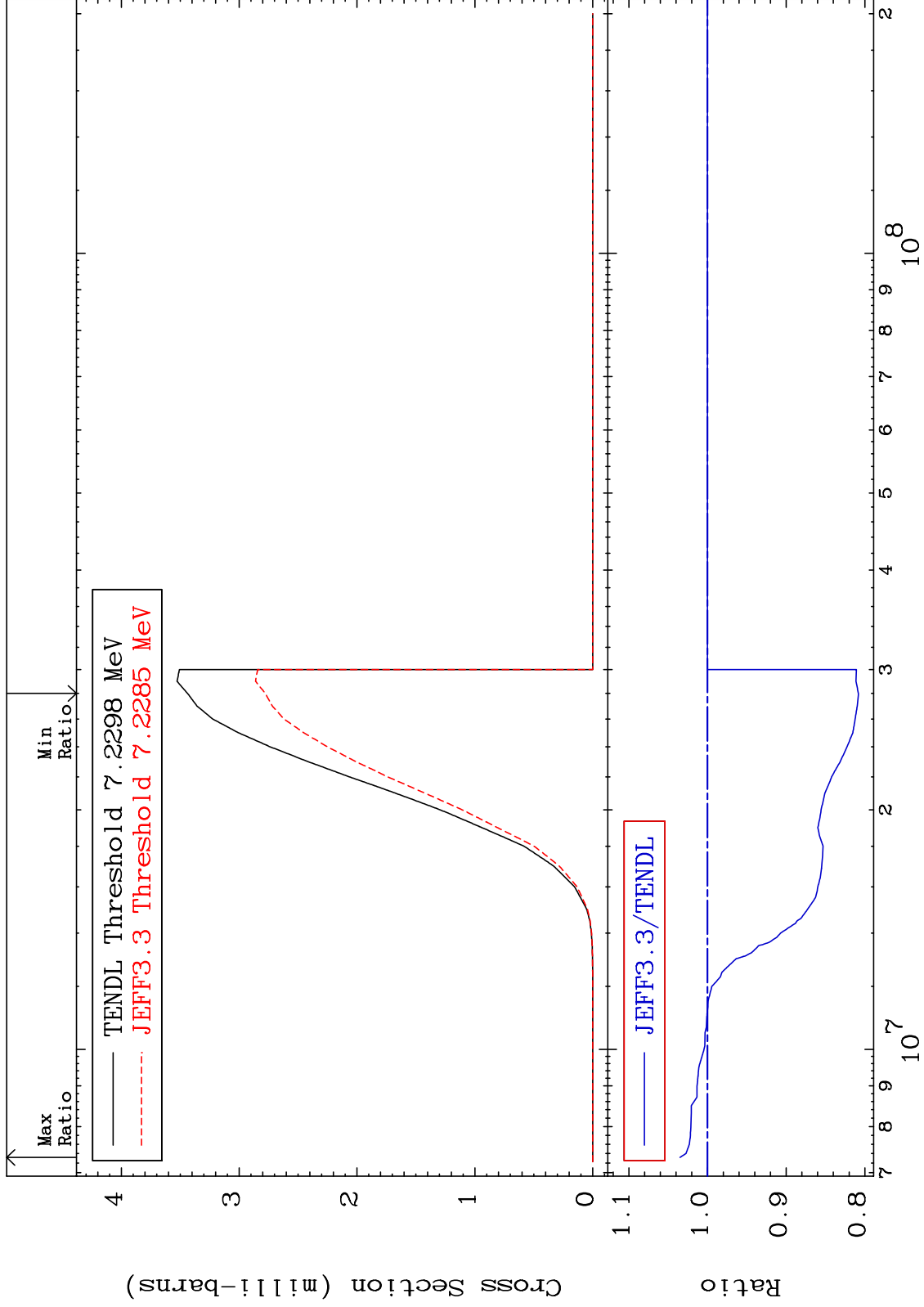
42-Mo-93

MAT 4228

(n, t): 41-Nb-91m1

42-Mo-93

Radionuclide Production Cross Section -19.18 To 3.498 %



102

Incident Energy (eV)

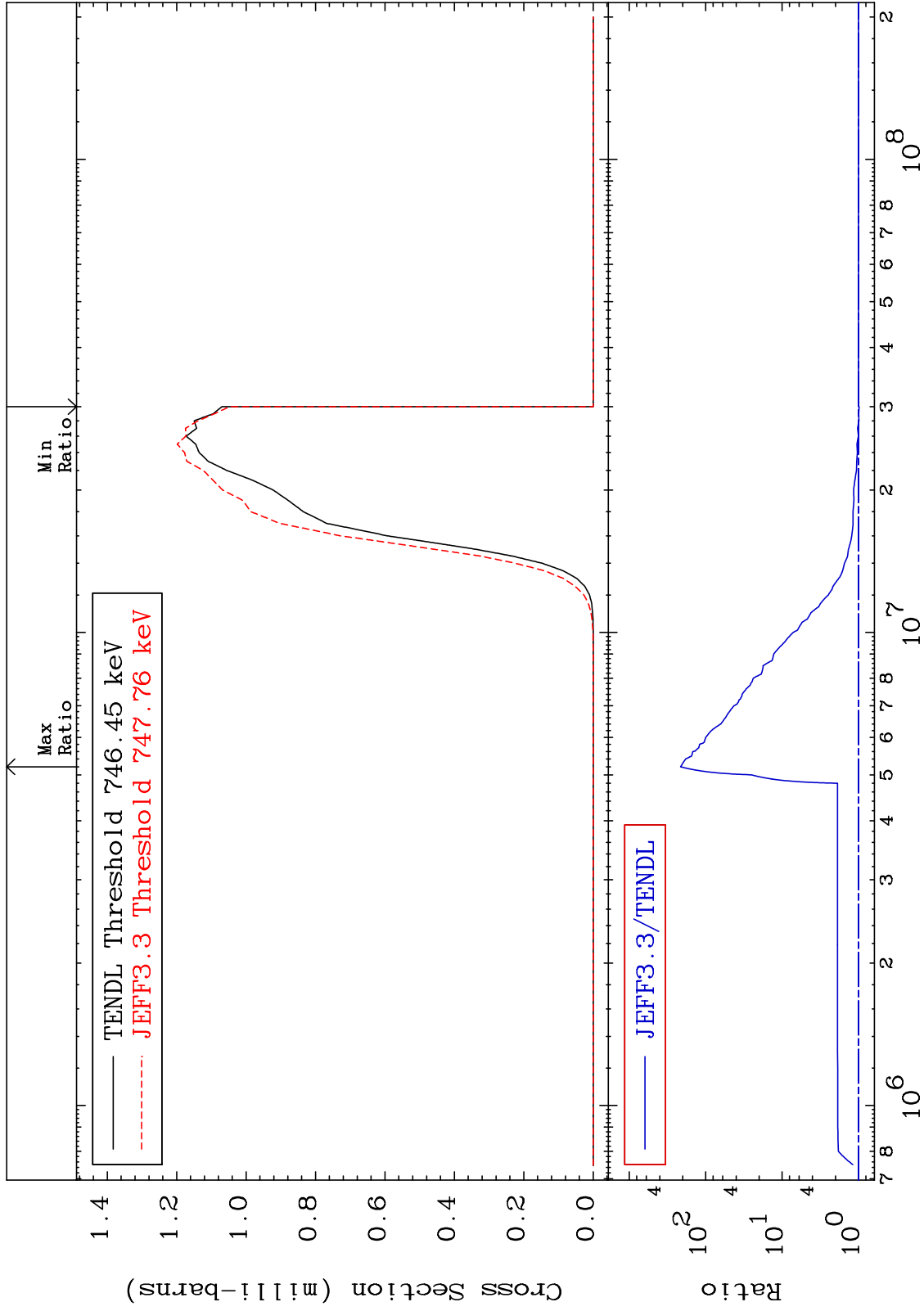
42-Mo-93

MAT 4228

(n,p) α :39-Y -89g

42-Mo-93

Radionuclide Production Cross Section -2.025 To 9999. %



103

Incident Energy (eV)

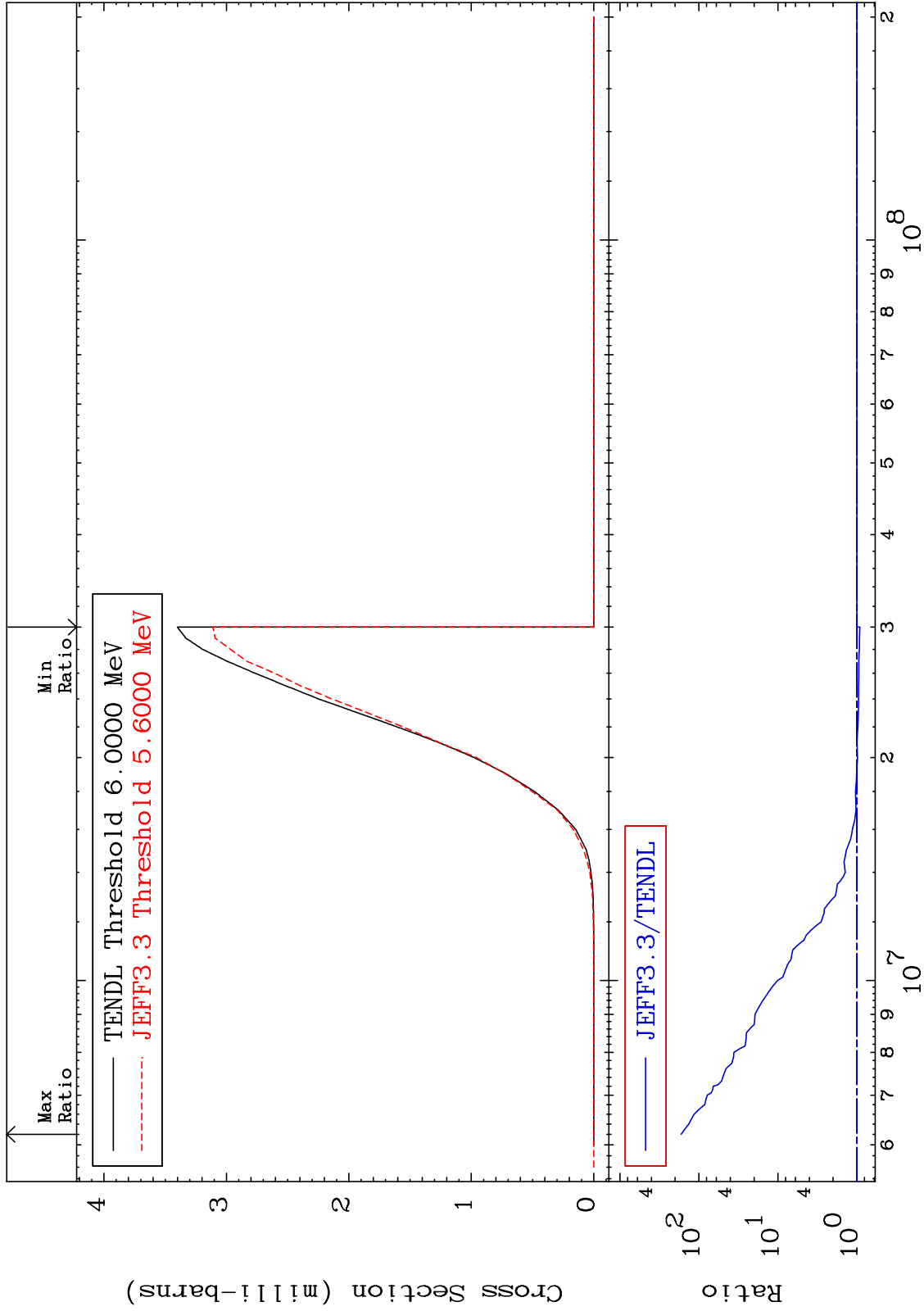
42-Mo-93

MAT 4228

(n, p) α :39-Y -89m1

42-Mo-93

Radionuclide Production Cross Section -8.570 To 9999. %



104

Incident Energy (eV)

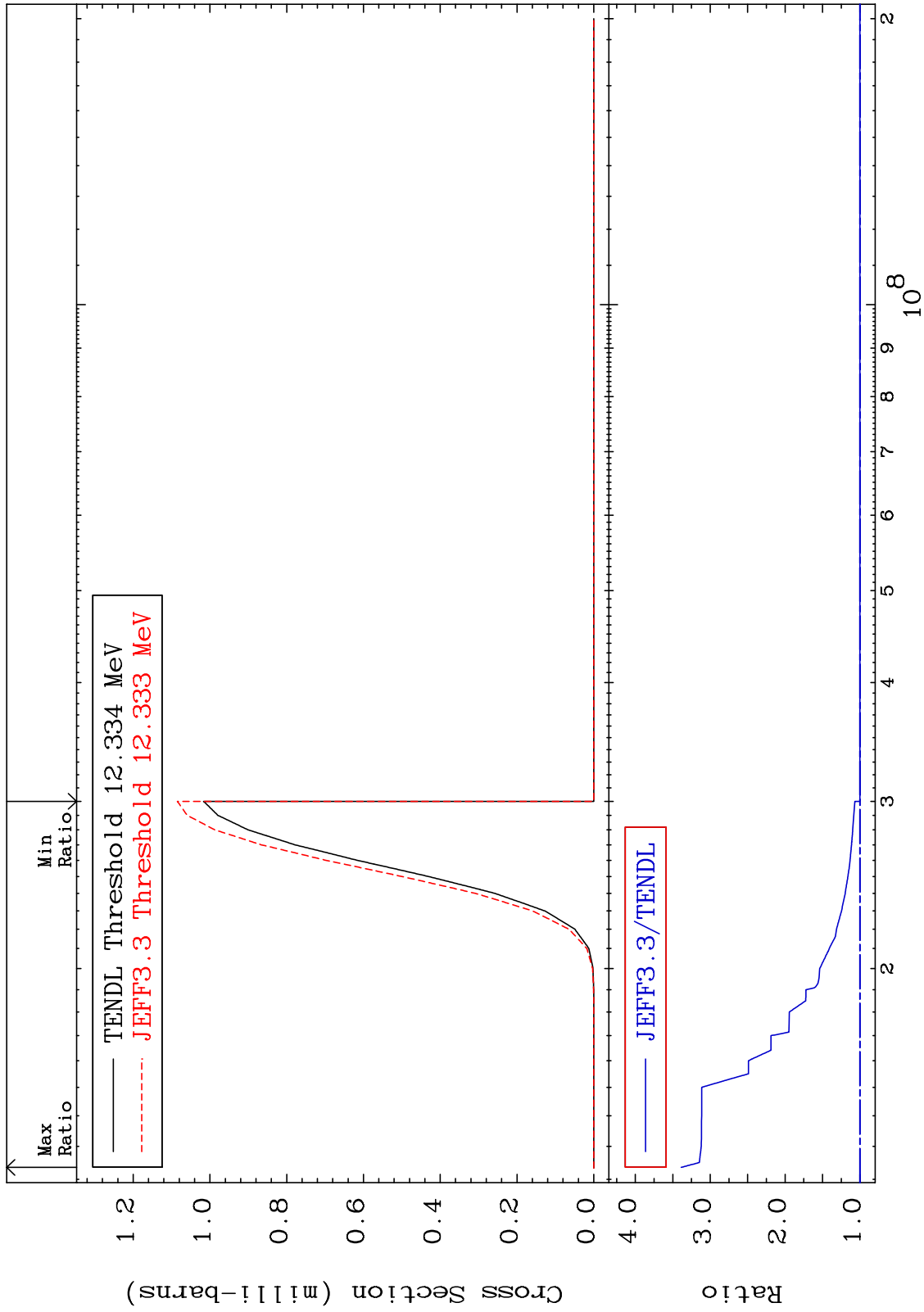
42-Mo-93

MAT 4228

(n,p) t:40-Zr-90g

42-Mo-93

Radionuclide Production Cross Section 0.000 To 238.7 %



105

Incident Energy (eV)

42-Mo-93

MAT 4228

(n, p) t: 40-Zr-90m3

42-Mo-93

Radionuclide Production Cross Section 0.000 To 151.4 %

